

Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.  $SECTOR~\pmb{6} \longrightarrow CHART~INFORMATION$ 

## **SECTOR 6**

### NORTHEAST COAST OF NEWFOUNDLAND—CAPE ST. FRANCIS TO CAPE FREELS

**Plan.**—This sector describes the NE coast of Newfoundland and off-lying dangers from Cape St. Francis to Cape Freels, including Conception Bay, Trinity Bay, and Bonavista Bay.

#### **General Remarks**

**6.1** Between Cape St. Francis and Cape Freels, about 92 miles NNW, the coast recedes to form Conception Bay, Trinity Bay, and Bonavista Bay. These large bays have depths greater than 183m, and are separated by high, rugged peninsulas indented by numerous inlets. Iron ore is mined on Bell Island in Conception Bay, where deep-draft vessels can be accommodated alongside.

Transatlantic cables are landed at Bay Roberts, Harbor Grace, Hearts Content, and Clarenville.

**Winds—Weather.**—Newfoundland has a climate that is generally temperate. The influence of the sea is modified by the cold waters of the Labrador Current, which flows along the E and W coast.

West winds usually prevail, but frequent shifts occur during the passage of depressions or storms. In general, to the E of Newfoundland, the most common direction, apart from the prevalent SW to NW directions, is S followed in frequency by N and SE.

On the E coast of Newfoundland, fog is brought in by NE and E winds during May, June, and July. The fog rarely extends far inland in summer, and in sheltered landlocked harbors there is usually much less than at sea.

When fog is generally over the open sea, and the wind is offshore, there may be either a gap between the shore and the fog, or the fog may be thinner; the more hilly the land the more marked will be the improvement in visibility. During late spring and summer, there is often a further marked improvement in the visibility close leeward of the land during late morning and afternoon when the land is at its warmest. During SW and light SE winds, when approaching the coast, especially under the lee of a point, a vessel will suddenly emerge from the fog and every feature of the coast will be distinctly visible.

**Ice.**—The ice-laden waters chill the atmosphere above them and also set up a barrier against the warm air masses from the S. Spring is late and the summers are cool. Winters are relatively mild, but are generally more severe on the W coast, which is affected by its proximity to the continental land mass.

Two kinds of ice are encountered along the E coast of Newfoundland, the dramatic and picturesque icebergs, which are of glacial origin, and the prosaic sea ice (frozen sea ice), which has a much more important effect on navigation. The sea ice forms in the coastal waters from Fogo Island N and is carried down the coast by wind and current. It sometimes rounds Cape Race, but its more common path is S or SE onto the N part of the Grand Banks of Newfoundland.

Sea ice begins to form on the coast of S Labrador in mid-December, and spreads S to Newfoundland waters in early January. It gradually spreads seaward and S to reach Notre Dame Bay and Fogo Island in late January. The subsequent developments depend very much on the prevailing winds of each particular winter.

In most years, the ice pack drifts off to the SE from Cape Freels, and the Newfoundland coast S of Cape Bonavista has only loose floes for brief periods. The S penetration of the pack ice is partially dependent on the severity of the winter as well as wind directions, and extension to about 48°N, 49°W in mid-March is considered normal.

The ice which forms early in the winter in the waters of N Newfoundland and southern Labrador grows to a maximum of about 0.6m during the winter, and much of it is carried S by wind and current to the waters E and SE from Cape Bonavista. The floes which remain, in the White Bay area for instance, can reach 0.7 to 0.9m.

Floe size in eastern Newfoundland waters is mainly related to the distance from the ice edge, as Atlantic swells will soon break the larger floes into smaller pieces. As a result, ice cakes and small floe sizes are predominant S of Cape Freels, while medium floes occur mostly at distances over 50 miles within the pack.

Retreat of the ice begins in late March, but changes are relatively slow at first. By the end of April the S edge has usually retreated to Bonavista Bay. In May, the rate of melting increases and the pack has usually retreated to S Labrador waters by the final week in the month. This retreat releases many of the icebergs carried S by the Labrador Current and their numbers in Newfoundland waters is at a peak.

**Tides—Currents.**—The ocean current, having the greatest effect on the waters adjacent to Newfoundland, is the predominantly cold Labrador Current. The major part of this current sets S along the E coast extending as far as 50 miles offshore. The rate may be slightly in excess of 1 knot, but stormy weather in the North Atlantic may diminish the rate of the current and cause it to set across its ordinary direction or even be reversed on the surface. When such a change occurs, it is usually regarded as an imminent gale warning.

**Pilotage.**—Pilotage for ports in this sector is obtained through the Atlantic Pilotage Authority. See Pub. 140, Sailing Directions (Planning Guide) North Atlantic Ocean, Baltic Sea, North Sea, and the Mediterranean Sea for further information.

## **Conception Bay**

6.2 Conception Bay (47°40'N., 53°00'W.) is entered between Cape St. Francis and Split Point (48°06'N., 52°51'W.). The bay extends about 35 miles SSW to its head. The fairway through the bay is over 183m, clear of dangers. The shores of the bay are mostly steep-to, with no known dangers more than 1 mile offshore. A depth of 12m exists 55 miles ENE of Cape St. Francis. The shore, from the cape S for 11 miles, is formed of steep, bare cliffs, which change to gentle, partially cultivated slopes. The S part of the W side and the head of the bay are

indented by several deep inlets. Cape St. Francis consists of two low hills, the E marked by a lighthouse from which a light is shown.

**Ice.**—Ice normally fills the bay between the middle of January and March 1, and clears between the middle of March and April 20. Ice may remain until May 25.

**Portugal Cove** (47°38'N., 52°52'W.), with depths up to 21.9m, is protected by a long breakwater extending SW from the NE shore of the cove. A wharf, 44m long, with 2.5 to 3.9m of water alongside its outer face, extends from the shore close SE and parallel to the breakwater. A ferry wharf, from which a regular ferry service is maintained to Bell Island, adjoins the wharf. The ferry wharf has depths of 3.5 to 6.1m alongside.

Range lights, in line bearing 093°41', lead to a berth at the principal wharf. A light is shown from the head of the breakwater. Church spires are conspicuous at the head of the cove, as is Princes Lookout, a 165m high hill.

**Anchorage.**—Anchorage, in depths of 23.8 to 25.6m, can be taken about 0.15 mile NW of Portugal Cove Light. Two submerged cables are landed at Portugal Cove; their positions can best be seen on the chart. Anchorage in this vicinity is prohibited.

Between Portugal Cove and Topsail Head, the shore is composed of partially cultivated slopes.

Broad Cove lies about 2 miles SSW of Portugal Cove. The Broad Cove River flows into the cove at its head. Submarine power cables are laid from Broad Cove to Bell Island. Anchorage is prohibited as shown on the chart.

**Topsail Head** (47°33'N., 54°55'W.) is a conspicuous coastal landmark about 5 miles SSW of Portugal Cove. The coast to the head of the bay consists of beaches, backed by salt water lagoons and fronted by shoals.



**Bell Island Light** 

**Long Pond** (47°31'N., 52°59'W.), a lagoon of two parts, separated by a strip of beach, is entered between two breakwaters which afford protection to a channel dredged to a width of 50m and which has a least depth of 7.9m. A light is shown from the head of the E breakwater. Lighted buoys mark the channel entrance. The E side of the entrance channel should be favored on entering. Oil storage tanks are conspicuous on a N approach to the harbor.

A public wharf, 245m in length, with a least depth of 6.2m alongside, lies on the W shore of Long Pond, close within the entrance. There is a turning basin adjacent to the wharf.

Mariners should not attempt to enter Long Pond without local knowledge.

**6.3 Bell Island** (47°38'N., 52°57'W.) is named after **The Bell** (47°36'N., 53°01'W.), a conspicuous conical rock lying off the W end of the island. The Clapper is another conspicuous rock lying off the S end of Bell Island. **Redmans Head** (47°39'N., 52°55'W.), marked by Bell Island Light, is a prominent headland at the NE end of the island. The village of Lance Cove is situated 1.25 miles ENE of The Clapper.



**Bell Island and Ferry Terminal** 



Corutesy of Newfoundland Interactive **Bell Island Light** 

**Tides—Currents.**—Currents with velocities of 1 to 3 knots are reported at Bell Island. A vessel anchored between Bell Island and Little Bell Island experienced a current setting SW for several hours rated about 3.5 to 4 knots against a fresh SW gale.

**Anchorage.**—Anchorage can be taken, in depths of 38.4 to 40.2m, with The Clapper bearing 288° and the W end of Little Bell Island bearing 220°.

**Caution.**—Several sunken wrecks lie between Bell Island and Little Bell Island. Bell Rock, with a depth of 4.6m, lies 1 mile SW of The Clapper.

**6.4 Wabana** (47°37′N., 52°56′W.) (World Port Index No. 1660), the principal town on Bell Island, was formerly an iron ore-exporting port, but the mines on the island are now closed.

**Depths—Limitations.—**A public wharf is situated in the small bight close W of The Beach, about 1.5 miles S of Red-

mans Head. The wharf is 106m long; it has an outer face that is 56m wide, with an alongside depth of 4.8m. A small L-shaped wharf, with alongside depths of 1.5 to 3.4m, extends 35m E from the inner part of the public wharf.

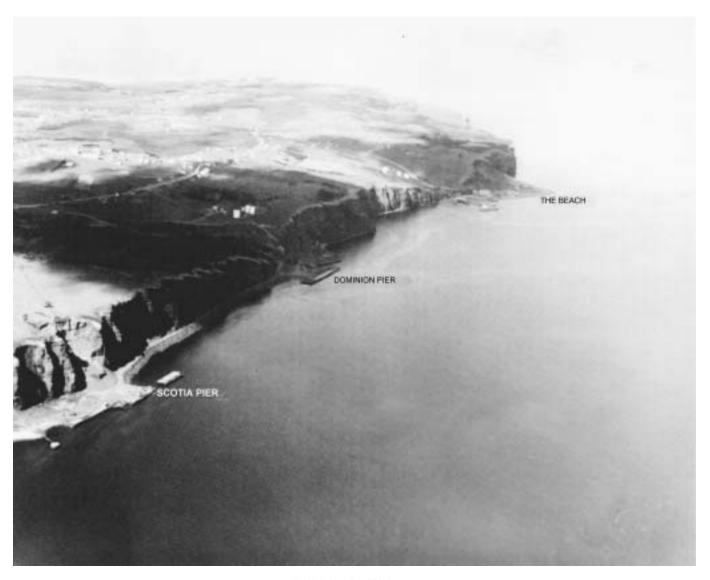
The ferry to Portugal Cove runs from an adjoining slip close W of the public wharf. There are 11 white oil tanks on the hill behind the ferry wharf.

Dominion Pier, in a state of disrepair, lies about 0.4 mile SW of the public wharf. A small boat wharf, 36m long, extends from the N part of this pier. Scotia Pier, about 0.4 mile SW of Dominion Pier, is also in a state of disrepair.

**Aspect.**—A light is shown from the ferry wharves.

Little Bell Island, 32m high and grassy, lies about 2 miles SE of The Clapper. Kelly Island, 58m high and wooded, lies nearly 1.5 miles SW of Little Bell Island.

Holyrood Bay, Harbor Main, Gasters Bay, and Colliers Bay are four large inlets which indent the head of Conception Bay.



Bell Island—Wabana

**6.5 Holyrood Bay** (47°26'N., 53°07'W.), the S inlet, is deep throughout, but fringed along both shores as far as 0.15 mile by foul ground. **Harbor Main Point** (47°27'N., 53°08'W.) marks the W entrance of the bay. **Butterpot** (47°25'N., 53°06'W.), an eminence marked by a cairn, is prominent near the head of the bay.

**Holyrood Harbor** (47°24'N., 53°07'W.) includes the waters of the bay, with the head of the harbor divided by a peninsula into North Arm and South Arm. A conspicuous church and spire are situated close S of **Joys Point** (47°24'N., 53°08'W.), the N end of the peninsula. Three chimneys, having red and white banded stacks, rise on the E shore of the harbor. Georges Peak, about 1 mile S of Joys Point, is marked by a cross on its summit, visible all over the bay.

Leading lights, in line bearing 183°32', are situated on the SE side of the head of South Arm.

The harbor is open to navigation all year.

**Depths—Limitations.**—The Ultramar Canada Wharf is T-shaped and situated on the E side of South Arm, with a least depth of 9.8m alongside. Vessels of up to 213m in length, having a draft of 9.8m, can be accommodated. Crude oil is imported and refined petroleum products exported from this wharf. Numerous oil tanks stand near the wharf.

The generating plant wharf, L-shaped and 66m long, has a least depth of 15.2m alongside, and is situated 3 miles N of the Ultramar Canada Wharf. In South Arm, there is a T-shaped Government wharf, with depths of 4.6 to 5.5m alongside, situated near the head of the arm.

**Pilotage.**—Pilotage is compulsory. Pilots board off Holyrood Bay, about 1 mile NNE of Harbor Main Point, or if coastal pilotage is required, off St. John's.

Vessels requesting a pilot should send their ETA in GMT at the appropriate pilot station 12 hours in advance to the Atlantic Pilotage Authority. Confirm or amend the time of arrival not less than 2 hours before arrival, if boarding off Holyrood, or 1 hour before, if boarding off St. John's. The pilot sometimes remains on board for discharging operations.

**Anchorage.**—Good anchorage can be taken in South Arm, in depths of 29.3 to 32.9m, mud and sand.

**Harbor Main** (47°27'N., 53°09'W.) is entered between Salmon Cove Point, marked by a light, and Harbor Main Point, about 1 mile SSE. A small island lies 0.1 mile NW of the latter point, and shoals of 4.6m extend almost 0.15 mile NE of the island. A church with spires is conspicuous on the W shore of the inlet.

A public wharf with two small piers lies about 0.3 mile S of the church. The N pier, 29m long and 8m wide, has depths of 1.5 to 5.5m along its inside face. The S pier is 18m long and 6m wide, with depths of 2.7 to 5.2m along both sides.

**Anchorage.**—Constricted anchorage can be taken, in a depth of 21.9m, with the church bearing 308°. This anchorage is open to the NE.

**6.6 Gasters Bay** (47°28'N., 53°10'W.), entered W of Salmon Cove Point, is at least 36.6m deep and free of dangers. The head of the bay is divided by a peninsula into two coves. A light is shown from **Ballyhack Point** (47°27'N., 53°12'W.), the termination of the peninsula. **Blue Hills** (47°26'N., 53°15'W.), a range with a double summit, is conspicuous.

**Conception Harbor** (47°26′N., 53°13′W.), open NE, is the W of the two coves forming the head of Gasters Bay. Mouse Rock, with a depth of 0.9m, lying in the harbor entrance, is marked by a lighted buoy.

A public wharf, situated at the head of the harbor, is 7m wide and extends 52m to a depth of 5.5m. Conception Harbor Light is shown from the head of the pier.

Anchorage, with local knowledge, can be taken, in 12.8m, sand, in the harbor.

Colliers Bay (47°29'N., 53°12'W.) is entered between Seal Head and Colliers Point (47°31'N., 53°10'W.). Seal Head is a steep bluff rising to Twin Peak. A small peninsula (Ryans Head) is located 2.5 miles SSW of Colliers Point. The bay is deep up to 0.5 mile off its head, but the channel is encumbered with rocks and shoals. A wharf situated S of Ryans Head (47°29'N., 53°13'W.) has depths of 4.6 to 5.5m alongside. The wharf was reported (1996) in disrepair.

Two rocks, the outer of which dries 0.6m, are marked by a lighted spar buoy, and are located 0.2 mile NE of the N entrance point to Thornlea.

**Harbour Rock** (47°30'N., 53°12'W.), which dries 0.3m, lies about 1.2 miles SW of Colliers Point.

**Anchorage.**—Anchorage can be taken with local knowledge, in depths of 7.3 to 16.5m, gravel, SW of Ryans Head.

**6.7 Brigus Bay** (47°32'N., 53°12'W.) (World Port Index No. 1650), entered close S of **North Head** (47°33'N., 53°11'W.), is marked by a light shown from a red and white striped tower. A village situated between steep, barren hills at the head of the bay is devoted to fishing. Ice in the bay is broken up early by the sea setting into the bay. A wharf at the head of the bay has depths of 5.5 to 6.7m alongside its head from which a light is shown.

**Anchorage.**—Anchorage can be taken by small vessels, in a depth of 9.1m, mud and sand, about 0.1 mile off the wharf.



**Brigus Bay** 

**Bay de Grave** (47°35′N., 53°12′W.) is entered between **Burnt Point** (47°34′N., 53°11′W.) and Blow Me Down Head, about 1.2 miles N. The bay extends SW for 4.5 miles and is deep throughout. Sopers Rock, with a depth of less than 1.8m, lies 0.1 mile N of Burnt Point. Ship Cove, located 0.5 mile WSW of Blow Me Down Head, has a wharf with depths of 4.3 to 7.9m along both sides of the outer 64m.



**Brigus Bay** 

**Port de Grave** (47°35'N., 53°14'W.), a village situated about 0.4 mile WSW of Ship Cove, has two wharves, each with depths of up to 3m alongside. Church spires are conspicuous in the village and at Bareneed, about 1.25 miles SW.

**Cupids Cove** (47°33'N., 53°13'W.), with the village of Cupids at its head, is located about 2 miles SW of Burnt Point. Spectacle Head, a high bluff, is conspicuous within the W shore of the cove. A wharf in Cupids Cove has a depth of 1.4m at its head. The wharf was reported (1996) in disrepair.

**Anchorage.**—Anchorage can be taken by small vessels in the cove, in depths of 5.5 to 7.3m, sand and mud.

Green Point lies about 1.4 miles NE of Blow Me Down Head.

**6.8 Bay Roberts** (47°36'N., 53°12'W.), entered between a point almost 0.3 mile NNW of Green Point and **Mad Point** (47°37'N., 53°12'W.), about 1 mile WNW, extends about 4 miles SW. A least depth of 18.3m exists in the fairway. Abovewater rocks lie close N of the SE entrance point.

A port hand lighted spar buoy and two starboard hand lighted spar buoys are moored close NE of Coley's Point and mark the approach into Bay Roberts Harbor.

A light is shown from the SE entrance point. Three lights are shown below the main light; the center light, in line with Southern Rocks, which are 4m high, shows red and the outer two lights show white.

**Fergus Island** (47°36'N., 53°13'W.) lies 0.2 mile off the NW side of the bay. The head of Bay Roberts is divided into two coves by **Coley's Point** (47°35'N., 53°15'W.), from which a light is shown.

**Bay Roberts Harbor** (47°35′N., 53°16′W.) (World Port Index No. 1640), the N of the two coves divided by Coley's Point, is easy to access. A spar buoy is moored close-to a sunken rock lying 0.6 mile W of above-water rocks lying close-off Coley's Point.

**Depths—Limitations.**—The public wharf at the town is 119m long. There are depths of 3.7 to 5.9m along both sides of the outer 47m length of the wharf.

The Avalon Wharf lies about 0.2 mile S of the public wharf on the opposite shore. It is 101m long, with depths of 4.6 to 5.8m alongside.

A wharf, 28m long, lies near a church about 0.6 mile NE of the public wharf. All other wharves are in disrepair and not used.

Harbor International Wharf, 83m long and with depths of 5.4 to 8m alongside, extends from the N shore of Bay Roberts Harbor, close WSW of the public wharf.

**Anchorage.**—Anchorage can be taken, in depths of 8.2 to 10.1m, within the harbor.



**Bay Roberts Harbor** 

**6.9 Spaniard's Bay** (47°37'N., 53°15'W.), entered between Mad Point and **Coopers Head** (47°38'N., 53°13'W.), about 1.4 miles NNW, has depths over 36.6m as it extends about 4 miles SW. The SE side of the bay is exposed to a heavy sea during E gales. Vessels should not close Mad Point within 1 mile on SW bearings in stormy weather, because of foul ground extending offshore. Green Head, near the head of the bay, rises to a conical hill 33m high.

**Depths—Limitations.**—A public wharf, 47m long, extends to a depth of 4.4m at North Cove, near the NW end of the cove. The remains of a wharf, with depths of 0.3 to 0.6m, extend about 90m from shore. Churches are prominent along the shores.

**Anchorage.**—Anchorage can be taken in the bay off North Cove, in depths of 9.1 to 18.3m, with Green Head bearing more than 210°.

**Bryants Cove** (47°41'N., 53°11'W.), a small bight, is entered between Spare Point and Feather Point, about 1.5 miles NNE. The Sunker, a drying rocky patch, lies in the middle of the cove entrance. A conspicuous, high hill, open to the S of a steep fall on the N shore, bearing 243°, leads S of The Sunker and adjacent dangers. There is a wharf at the head of the cove having a length of 61m and extending to a depth of 2.4m.

The **Harbor Grace Islands** (47°43′N., 53°09′W.), a group of islands and rocks, lie between 0.75 and 1.5 miles NE of Feather Point. The highest island of the group, marked by a light, is 32m high. Eastern Rock, the NE islet of the group, is 27m high with a peak resembling a tower. White Rock, a rocky patch with a least depth of 5.5m, on which the sea breaks, lies about 0.1 mile NNE of Eastern Rock. Ragged Rocks lie about 0.2 mile W of the southwesternmost Harbor Grace Island.

**6.10 Harbor Grace** (47°41'N., 53°13'W.) (World Port Index No. 1630) is entered between Feather Point and Old Sow Point, about 1.5 miles S. The harbor extends 4.5 miles SW and is bound by high hills. About 1.5 miles within the entrance, the harbor is encumbered by a bar. The channel across the bar has a least depth of 6.7m. Between the channel and the SE side of the harbor, there is a bank of boulders; in heavy weather the sea breaks on this bank. A lighted buoy is moored off the NW end

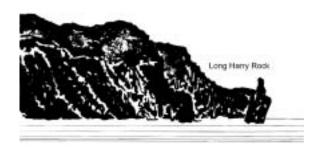


#### **Harbor Grace**

of the bank. The depths in the entrance and outer harbor vary from 16.5 to over 36.6m. The inner harbor has 9.1 to 16.5m.

Ice rarely stops navigation. Drift ice may appear during February and March, but disappears with SW winds.

**Long Harry Rock** (47°42'N., 53°11'W.) 22m high, lies 0.75 mile SW of Old Sow Point. Salvage Rock lies 0.35 mile S of Long Harry Rock. In a heavy sea, breakers are visible 0.15 mile SW of the rock.



Long Harry Rock, bearing 040°

Salvage Rock, with a narrow pointed peak, 15m high, lies about 0.4 mile S of Long Harry Rock; in a heavy sea, breakers extend about 135m SW from this rock.

**6.11 Point of Beach** (47°41'N., 53°13'W.), at the entrance of the inner harbor, is marked by a lighted tower with white topmark. **Ship Head** (47°41'N., 53°14'W.) is marked by a white square tower with red and white bands These two lights, aligned, lead over the bar in a least depth of 6.7m.

**Depths—Limitations.**—The fish plant wharf is 186m long, with alongside depths of 4m that increase to 7.6m towards the SW end. A depth of 4.3m lies about 14m off the face of the wharf, 40m from the NE end.

Close NE of the fish plant, there is an L-shaped public wharf, 61m long, with depths of 4.3 to 6.1m along its outer part.

About 0.2 mile E of Ship Head, there is an L-shaped oil wharf, 39m long, with a least depth of 6.1m alongside; the wharf was reported (1996) in disrepair.

A T-shaped oil jetty situated SW of Ship Head is in disrepair and is no longer in use.

**Aspect.**—Landmarks include several high hills charted NW of the town of Harbor Grace, and the Roman Catholic Cathedral, which has two conspicuous spires of uneven height.

**Pilotage.**—Pilotage is not compulsory, but a licensed pilot is available, if desired. A pilot can be arranged by giving 24 hours notice to the Atlantic Pilotage Authority. The pilot will board off St. John's in position 47°33'42"N, 52°37'54"W, or off the Harbor Grace Islands, provided the vessel's local agent arranges for a boat to embark the pilot.

Harbor Grace, the town, is situated in the vicinity of Point of Beach.

**Anchorage.**—Anchorage can be taken, in depths of 9.1 to 16.4m, in the area SW of Point of Beach.

**Caution.**—A submerged power cable extends SSW from Point of Beach to the opposite shore. Two other cables are landed in the vicinity of Point of Beach from seaward. Care must be taken to avoid this area when anchoring.

**6.12 Bristol's Hope Cove** (47°43'N., 53°11'W.) lies between Old Sow Point and Mosquito Point, 0.5 mile NW. There is a gravel beach at the head of the cove. There is temporary anchorage in the cove, in depths of 7.3 to 29.3m, sand and rock, but it is open to the NE.

Carbonear Bay (47°44'N., 53°13'W.) (World Port Index No. 1620) is entered between Mosquito Point and Crockers Point, about 0.8 mile NNW.

**Ice.**—The bay freezes only in severe winters, as the swell normally breaks up the ice which can be troublesome during the spring.

**Depths—Limitations.**—The entrance channel has a depth of 14.6m.

Government Wharf, the largest, is L-shaped and has a least depth at LW of 5.2m alongside. A ship of 7,000 grt, with a draft of 6.1m, can berth alongside in the harbor.

**Aspect.—Carbonear Island** (47°44'N., 53°10'W.), with cliffy shores, lies about 0.5 mile NE of Mosquito Point. A light is shown from a square tower on the summit of the island. Foul ground lies between the point and the SW extremity of the island.

**Saddle Hill** (47°43'N., 53°13'W.) 153m high, rises conspicuously about 1.5 miles WSW of Mosquito Point.

**Kane Rock** (47°45'N., 53°10'W.), with a depth of 14.9m, and Saucy Joe Rock, about 0.8 mile N of the island light, with a depth of 20.1m, lie in the bay approach. During heavy seas with E winds, the sea occasionally breaks on these rocks.

A light is shown from the head of Government Wharf (47°44'N., 53°13'W.).

**Pilotage.**—Pilotage is not compulsory, but a licensed pilot is available if desired. A pilot can be arranged by giving a 24 hour notice of requirement to "Pilots, St. John's". The pilot will board off St. John's in position 47°33'24"N, 52°37'30"W, or off Carbonear Island, provided the vessel's local agent arranges for a boat to embark the pilot. Although Carbonear is a port of entry, customs, quarantine, and immigration matters are handled from Harbor Grace.

**Anchorage.**—Anchorage can be taken off the N shore of the bay, in depths of 12.8 to 16.5m, sand and mud. The middle and S side of the bay should be avoided for anchoring, as E and NE winds raise a rough sea.

**Directions.**—From Carbonear Bay Approach Buoy (47°45'N., 53°10'W.), steer a mid-channel course for the entrance, avoiding Saucy Joe Rock.

On approaching Harbor Grace from the NE, steer with the E spire of the Roman Catholic Cathedral in line with Salvage Rock, which leads about 0.3 mile N of White Rock.

To cross the bar and enter the inner harbor, steer with Point of Beach Light in line with the light on Ship Head. When Long Harry Rock is in line bearing 040°, astern, with the extremity of the land NE of it, steer 220°, keeping the marks astern aligned. This course leads in a least depth of 6.7m over the bar.

**6.13** Conception Bay—Northwest side.—Between Crockers Point and Broad Cove Head (47°50'N., 53°05'W.), about 7 miles NE, lie several detached islets, rocks, and shoals lying as far as 0.5 mile offshore. Vessels running this coast, or entering Carbonear Bay from the N, should keep Broad Cove Head bearing less than 032° and open SE of the above-water rocks lying offshore between **Folly Rocks** (47°46'N., 53°09'W.) and Crockers Point.

Between Broad Cove Head and **Flambro Head** (48°01'N., 52°58'W.), the coast has few indentations. **Western Bay** (47°53'N., 53°04'W.), entered N of Western Bay Head and marked by a light, has depths of 12.8 to 20.1m in its outer part. **Job Rock** (47°57'N., 53°00'W.), with a depth of 8.5m, lies 1.75 miles offshore.

Between Flambro Head and **Split Point** (48°06′N., 53°51′W.), the coast is indented by several bays and coves. **Bay de Verde Head** (48°05′N., 52°54′W.), a salient outcropping, marks the N extent of Bay de Verde, which is marked S by **Low Point** (48°04′N., 52°57′W.). The N half of the bay has depths of 23.8m, clear of dangers; the S half is encumbered with rocky shoals. A wharf situated at a village, close NW of the headland and inside a breakwater, has depths alongside of 1.6 to 7.5m alongside. A lighted bell buoy is moored close off the submerged end of the breakwater.

**Baccalieu Island** (48°08'N., 52°48'W.), 3 miles long N and S, lies about 1.5 miles E of Split Point and is separated from it by Baccalieu Tickle, a deep-water channel. The island has shores formed of rocky cliffs, rising steeply, and fronted by foul ground. **Wall Rock** (48°07'N., 52°50'W.), with a depth of 9.4m, lies nearly in mid-channel.

A light shown from a red tower on the NE end of the island is often obscured by fog when the lower part of the island is visible. Another light is shown from the SW extremity of the island.

### **Trinity Bay**

**6.14** Trinity Bay (Clarenville) (48°00'N., 53°30'W.) is entered between **Grates Point** (48°10'N., 52°56'W.) and **Horse Chops** (48°21'N., 53°13'W.). The bay extends SW for about 50 miles and contains many small harbors and anchorages.

**Winds—Weather.**—After E winds, a current sets into the bay along the NW shore, and fog hangs over the NW side of the bay more than over the SE side.

Ice.—Trinity Bay never freezes over, but field ice has been reported in December, and has continued off the mouth until May. Icebergs drift up the bay as early as the last week in May, and some remain until the last week in August, when they are generally aground. Otherwise, with favorable winds, the bay is generally clear of ice by the end of June.

**Depths—Limitations.**—Depths of more than 200m prevail in the middle of the bay as far as **Bull Arm** (47°45′N., 53°50′W.). Numerous dangers lie up to 2 miles off the shores.

**Aspect.**—Grates Point, the SE entrance point of Trinity Bay, is fronted by a reef extending 0.75 mile E, and Martins Ledge, about 1.5 miles NE. A cove located close E of the point has a small wharf.

Horse Chops Light is shown from the N side of the entrance to Trinity Bay.

**Pilotage.**—Pilotage is not compulsory, however, licensed pilots are available. St. John's Pilots will take these assignments. Arrangements should be made for pilot to board either off St. John's at position 47°33'42"N, 52°37'54"W or off Trinity Bay (Clarenville). However, during winter, pilot will only board at St. John's. Arrangements should be made through the Atlantic Pilotage Authority (APA) Central Dispatch Office in Halifax, Nova Scotia. However, pilots may still be ordered through any Canadian Coast Guard radio station with a clear request to "Please forward to Atlantic Pilotage Authority Dispatch, Halifax." For more detailed information on ordering pilots see Pub. 140, Sailing Directions (Planning Guide).

**Regulations.**—A traffic routing scheme is in operation in Bull Arm and approaches. Vessels using the traffic scheme are to contact Hibernia Marine Communications on VHF channel 9 prior to entering.

# Trinity Bay—East Side—Grates Point to Cottier Bay

**6.15** Breakheart Point, the SW entrance point of Heart Cove, lies about 1.4 miles SW of Grates Point. The coast in this area is composed of cliffs, rising to about 91m.

Sgeir Island, 9.1m high, lies 0.1 mile offshore, about 1 mile SSW of Breakheart Point. Black Point, almost 2 miles SSW of Sgeir Island, is a fairly prominent steep point.

Old Perlican Cove (48°05'N., 53°01'W.), a cove that indents the coast about 6 miles SW of Grates Point, is entered between **Skerwink Point** (48°06'N., 53°01'W.) and **Bull Gulch Point** (48°04'N., 53°03'W.). The coast NE of the cove is cliffy, high, and fringed with rocks and shoals.

**Perlican Island** (48°05'N., 53°01'W.), marked by a light, lies in the cove entrance. A rocky spit connects the E side of the island with the shore at the head of the cove. Lighted Bell Buoy TP is moored 0.6 mile W of Skerwink Point.

A wharf, with a least depth of 2.4m, is situated at the head of the cove. A light is shown from the seaward ends of the innermost and outermost breakwaters.

**Anchorage.**—Anchorage can be taken SE of Perlican Island, in a depth of 9.1m, gravel. A swell sets into the cove during NE gales. Preferred anchorage is taken with the SW end of the island bearing  $298^{\circ}$  and the E extremity bearing  $006^{\circ}$ .

**6.16** Russels Cove (48°04'N., 53°07'W.) is entered between Bull Gulch Point and Salvage Point (48°04'N., 53°10'W.), a rugged beach of stones around a steep, gravel cliff rising to a high hill. Several small coves indent the shores of Russels Cove.

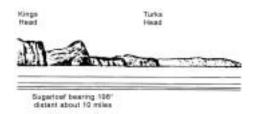
At Sibleys Cove, 2.5 miles SE of Salvage Point, there is a wharf with an alongside depth of 3m.

Rocky, foul ground extends N of Salvage Point for about 1.5 miles. There are depths of less than 1.8m over these rocks.

Between Salvage Point and Hants Head, about 5.7 miles SW, the coast is bordered by sunken rocks.

**Hants Harbor** (48°01'N., 53°15'W.), located about 1 mile E of Hants Head, is marked by a light shown from a white, square tower on the E entrance point. There is a public wharf in the harbor, with a least depth of 7.9m alongside. A fish plant is situated at the head of the wharf.

The rock breakwater, situated close S of the W entrance point, shows a light.



#### Marks for clearing the dangers off Hants Head

**Riff Raff Rocks** (48°03'N., 53°14'W.), a group of sunken rocks, on which the sea breaks, which includes Tail of the Bank and Knife Rock, as well as other detached above and belowwater rocks, lie in the approaches to Hants Harbor. Two lighted fairway buoys are moored in the N and W approaches to Hants Harbor, which can be entered with local knowledge. A heavy sea sets into the harbor during and after gales, causing an undertow on the E side. The harbor rarely freezes over.

**6.17 Kings Head** (47°59′N., 53°19′W.) is high and cliffy. **Sugarloaf** (47°57′N., 53°21′W.) is a conspicuous, conical hill rising steeply from the coast. The coast SW of Kings Head is indented by coves. **Winterton Cove** (47°57′N., 53°02′W.), close N of Sugarloaf, has a boat harbor and wharf with a depth of 3.4m alongside the outer face.

Jeans Head, the N entrance point of New Perlican, lying about 1.7 miles SSW of Sugarloaf, is a bold, steep bluff which rises to a hill over 76m high. A light is shown from the head.



New Perlican

**New Perlican** (47°55'N., 53°21'W.), a cove, is entered between Jeans Head and **Garlep Point** (47°55'N., 53°23'W.), a steep-to point. Jeans Head is a bold, steep bluff which rises to a high hill. New Perlican is separated into two coves by Bloody Point, on which a light is shown from a tower. The inner cove, SE of Bloody Point, is suitable only for small craft.

**Anchorage.**—Anchorage can be taken, in a depth of 14.6m, with Bloody Point Light bearing 151°, and clear of the 7.6m patch 0.4 mile S of Jeans Head.

Between Garlep Point and Norther Point, about 2 miles SSW, the coast consists of low cliffs.

**6.18** Heart's Content (47°53'N., 53°23'W.) (World Port Index No. 1616) is entered between **Norther Point** (47°53'N., 53°23'W.) and **Souther Point** (47°53'N., 53°24'W.). A light is shown from a tower on Norther Point.

White Rock, with a depth of 8.8m, and a 9m patch, lie in the entrance of Heart's Content. The church at the head of cove, bearing 124° and open SW of Norther Point, leads SW of White Rock. A rock, with a depth of less than 1.8m, lies 90m W of Norther Point. Lousey Rock, above-water, lies 90m off Souther Point.

**Ice.**—Heart's Content freezes over between the end of January and the middle of February. The ice clears about the end of March. Northern ice arrives about mid-April and dissolves about mid-May.

**Depths—Limitations.**—A U-shaped pier, at the N side of the harbor, has a least depth of 8.5m alongside the W arm and 3.4m alongside the E arm. A light is shown from the elbow of the wharf.

**Aspect.**—Hearts Content Wharf Light is shown from a mast situated on the wharf along the north shore of the harbor.

**Anchorage.**—Good anchorage in the NE part of the cove can be taken, in depths of 9.1m to 25.6m, mud and gravel, N of the cable area.

The anchorage area is limited because of submarine telegraph cables. When ice conditions permit, buoys are placed marking the prohibited area limits.

**6.19** Seal Cove Head, 87m high, with a conspicuous scar left by a landslide on the seaward face, lies nearly 1.5 miles SW of Souther Point. Shuffle Board, a conspicuous hill 129m high, stands on the coast about 3 miles SSW of Souther Point.

Heart's Desire (47°49'N., 53°27'W.) is an open cove entered 4.5 miles S of Heart's Content. Hanging Hill is a prominent landmark located 2.5 miles E of Heart's Desire. Gannett Rock, with a depth of 9.1m, lies 1.25 miles WSW of Gannet Point (47°49'N., 53°28'W.), the S entrance point of the cove. Sugarloaf, in line bearing 031° with Shuffle Board, leads E of Gannet Rock and W of South Rock.

**Anchorage.**—Anchorage can be taken with local knowledge and offshore winds, in depths of 11 to 23.8m.

**Heart's Delight** (47°47'N., 53°29'W.) is an open cove. **South Rock** (47°46'N., 53°30'W.), with a depth of 6.4m, lies 0.5 mile W of the S entrance point. Local knowledge is required to enter and anchor in the cove which has shoal spits off its sides.

**Anchorage.**—Anchorage can be taken close within the entrance, in a depth of 12.8m.

**6.20** Whiteway Bay (47°42'N., 53°30'W.) is entered N of Black Point (47°41'N., 53°30'W.), the head of a promontory. A light is shown from the outer end of the breakwater on the N side of the bay.

**Whiteway Rock** (47°42'N., 53°31'W.), with a depth of 1.8m, lies in the bay entrance, as well as Red Rocks, which are above-water.

**Anchorage.**—Anchorage, with local knowledge, can be taken, in a depth of 14.7m, avoiding the 9.1m shoal E of Whiteway Rock.

**Hopeall Bay** (47°38'N., 53°33'W.) is entered between **Hopeall Island** (47°39'N., 53°33'W.) and **Hopeall Head** (47°38'N., 53°34'W.). A light is shown from a tower on the head.

There is a wharf, with a depth of 3.5m alongside the face, extending from the N shore near the head of the bay.

**Anchorage.**—Anchorage can be taken near the head of the bay, sheltered from winds except those from the WNW to N, in a depth of 16.5m.

**6.21 Dildo Arm** (47°34'N., 53°35'W.) is entered between a point which rises to a conical hill, located 4 miles S of Hopeall Head, and a point about 1 mile SW.

The Dildo Islands, the highest 15m high, extend 1.6 miles N of the SW entrance point. Dildo Cove lies close E of the NE entrance point. There are depths of 18.3 to 54.9m in Dildo Arm, which is divided into two coves by a promontory. The W cove is shoal.

**Ice.**—Ice occurs occasionally in the arm from about the middle or end of February and clears about the middle or end of March. Northern ice is rarely a problem in the arm.

Dildo, a village at the head of the arm, has a wharf with depths of 1 to 5.1m alongside.

At Dildo South, near the head of the arm on the E shore, there is a public wharf with depths of 6.1 to 7.3m alongside. A fish plant lies adjacent to this wharf.

Another public wharf is situated on the W shore near the head of the arm with depths of  $2.4\ \text{to}\ 7.3\text{m}$ .

**Anchorage.**—Anchorage can be taken, in a depth of 14.6m off Dildo Cove, sheltered from E winds. There is also anchorage, in 21.9m, off the E cove, sheltered from all winds except those from the N and NE. Local knowledge is necessary.

**Spread Eagle Bay** (Spreadeagle Bay) (47°33'N., 53°36'W.), entered ESE of **McLeod Point** (47°34'N., 53°37'W.), is divided into two coves by a point.

Anchorage can be taken in the E cove, in a depth of 22m, sand, sheltered from offshore winds. Local knowledge is necessary.

**Chapel Arm** (47°34'N., 53°39'W.) is deep and affords no safe anchorage.

## Trinity Bay—West Side—Cottier Bay to Random Sound

**6.22** Cottier Bay (Colliers Bay) (47°36'N., 53°42'W.) affords anchorage, in a depth of 18.3m, sand, about 0.5 mile from its head. Local knowledge is necessary.

**Tickle Bay** (47°40'N., 53°47'W.) is entered between **Tickle Harbor Point** (47°42'N., 53°42'W.) and **Green Head** (47°41'N., 53°49'W.). The bay is deep, but affords unsafe anchorage as a swell always sets in, and with E and NE winds it is dangerous.

Hudson Rock, about 2.3 miles SW of Tickle Harbor Point, with a depth of 4.6m, is the only obstruction in the mouth of Tickle Bay.

**Rantem Cove** (47°43'N., 53°51'W.) is entered between **Western Head** (47°42'N., 53°50'W.) and **Masters Head** (47°44'N., 53°51'W.). The cove is deep, with steep-to shores. There are S, W, and NW Arms leading off the cove. Boulton Island, 3.4m high, lies in the entrance of the NW Arm. Sunken rocks lie as far as 0.15 mile off the island.

**Anchorage.**—Sheltered anchorage can be taken well up into either the W or NW arm, in depths of 9.1 to 18.3m.

**Bull Arm** (47°47'N., 53°51'W.) is entered between Masters Head and the SW entrance point of **Rix Harbor** (47°46'N., 53°48'W.), and extends about 9 miles NW. The arm is deep and clear of dangers throughout the fairway. Depths decrease to 9.6m at the head of the arm, which affords the only good anchorage. The W side of Bull Arm is indented by several small coves suitable for small craft with local knowledge.

**Ice.**—Ice forms and Bull Arm freezes over from about the mid-January until mid-May, when the ice breaks up.

**Aspect.—Center Hill** (47°54'N., 53°52'W.), the highest land in the area, is an isolated, conical summit rising to a height of 346m above an elevated broken plateau overlooking the **Isthmus of Avalon** (47°51'N., 53°57'W.). **Crown Hill** (47°55'N., 53°47'W.) and two conical hills, rising N of the head of **St. Jones Harbor** (47°56'N., 53°46'W.), are more conspicuous from Trinity Bay.

**Bull Island** (47°46′N., 53°47′W.), partially wooded, lies off a bold and rocky mainland coast. Green Cove, close SW of the N end of the island, is an excellent landlocked boat harbor. **Rix Harbor**, on the mainland close W of Bull Island, affords good anchorage for small vessels, in a depth of 12.8m. The shores of the harbor are bold and steep-to.

**Shoal Bay** (47°52'N., 53°45'W.), open E, is not recommended as the approaches and entrance are encumbered with foul ground. The coast between the bay and **Niagara Point** (47°49'N., 53°46'W.) is bold and fringed by rocky, foul ground. Niagara Ledge lies 1.5 miles NE of the point.

**6.23 Deer Harbor** (47°54'N., 53°43'W.) is entered between **Big Island** (47°53'N., 53°44'W.) and **Deer Harbor Head** (47°54'N., 53°43'W.). Big Island, separated from the higher mainland by a narrow channel, is not easily distinguished from seaward. Two shoals, with least depths of 8.3 and 3.7m, lie about 0.3 and 0.5 mile NNE of the N tip of Big Island, near the middle of the entrance to Deer Harbor. Grub Island, lying 1.5 miles W of Deer Harbor Head, reduces the width of the harbor to 0.35 mile. Depths of more than 36.6m prevail as far as the island, decreasing to 10.9m about 1 mile from the inlet head.

**Ice.**—Ice forms and freezes over the harbor in January; it breaks up the latter part of April.

**Anchorage.**—Anchorage for small vessels can be taken, in depths of 12.8 to 36.6m, W of Grub Island. Vessels can also

anchor as convenient in the W part of the harbor, W of Gooseberry Island, in depths of 7 to 18m.



**Deer Harbor** 

**St. Jones Harbor** (47°56'N., 53°42'W.) is a constricted inlet extending about 3 miles W from the coast. Conical hills rise abruptly on the N side of the inlet, and Crown Hill is conspicuous at the head of the harbor. Least depths of 11m decrease to 7.5m near the W end.

The St. Jones Islands lie 0.5 mile E of the S entrance point of the harbor. Foul ground extends 0.15 mile W of the islands.

**Anchorage.**—Anchorage can be taken by small vessels near the head of the harbor, in depths of 7.3 to 16.5m, mud.

**Seal Island** (47°57'N., 53°41'W.) is connected to the coast by a rocky ridge with a depth of 5.5m. **St. Jones Head** (47°57'N., 53°40'W.) is a prominent, high headland. **Bald Head** (48°00'N., 53°38'W.) is a bold, precipitous bluff. A valley runs parallel with the coast within this bluff giving it a remarkable semi-isolated appearance. **Beaver Rock**, with a depth of 5.5m, lies 0.7 mile NE of Bald Head.

**6.24** Heart's Ease Inlet (48°02'N., 53°38'W.), a narrow inlet, is entered between Heart's Ease Point and Southeast Point, about 0.4 mile SW. The former point is the end of a small peninsula connected to the mainland by a neck of shingle.

There is an 11m shoal patch lying in the middle of the fairway entrance. Gooseberry Cove, on the N side of the inlet and about 0.5 mile within the entrance, has an L-shaped wharf with depths of 5.5 to 6.1m alongside.

**Anchorage.**—Anchorage can be taken off Ganny Cove, about 0.5 mile SW of Gooseberry Cove. A light is shown from the Gooseberry Cove Breakwater.

**Heart's Ease Ledge** (48°03'N., 53°36'W.), a shoal with a depth of 4m, is marked 0.25 mile E by a lighted buoy. **Green Islets**, above-water, and Long Island, lie on a narrow bank extending about 2 miles SW from the ledge. **White Rocks**, above-water, lie 1.25 miles SE of Long Island.

### **Trinity Bay—Random Sound**

**6.25** Random Sound (48°04'N., 53°36'W.) is entered between East Random Head (48°06'N., 53°33'W.) and West

Random Head (48°03'N., 53°37'W.). The sound consists of an outer part which extends from the entrance, W to Middle Cliff (48°04'N., 53°41'W.), where the sound divides into Southwest Arm and Northwest Arm. The former arm extends about 12 miles W; the latter, 17 miles long, passes along the S and W sides of Random Island.

**Ice.**—Ice forms and the sound freezes over in severe winters from about February 10 to about April 10-20, when the ice breaks up.

**Anchorage.**—Anchorage is prohibited in the Northwest Arm of Random Sound, between the entrance to Random Sound and the town of Clarenville.

**6.26 Outer part.**—The N shore is steep-to from East Random Head to **Salmon Cove** (48°05'N., 53°38'W.). The E end of the headland is formed of several wedge-shaped masses. Motion Island Light (48°06'N., 53°33'W.) is shown from a tower on an islet lying 90m E of the headland. Other islets lie nearby. Islets and rocks, awash, lie at least 0.1 mile offshore between the head and Salmon Cove.

The S shore, between East Random Head and **Fox Island** (48°03'N., 53°39'W.), is steep-to. Steep cliffs form the NW side of the island. Fox Harbor, close E, is foul, but a wharf extending from the N shore of the harbor has depths alongside of 3.4 to 4.6m.



East Random Head—Motion Island Light

**6.27 Southwest Arm.**—Southwest Arm is deep and clear of dangers in the fairway. **St. Jones Within Harbor** (48°03'N., 53°45'W.) affords good anchorage, with limited swinging room, in depths of 9.1 to 12.8m. There are a few small coves indenting the shores of the arm that have wharfs for shallow-draft vessels and limited anchorages; all require local knowledge.

At **Long Beach** (48°00'N., 53°49'W.), there is an L-shaped public wharf, with a depth of 4.6m alongside. Submarine cables are laid across the head of Southwest Arm between North Bight and South Bight.

**6.28 Random Sound—Northwest Arm.**—The S side of the arm as far as **Pudding Point** (48°05'N., 53°42'W.) is a steep cliff backed by high hills. Quarry Rock, with a depth of 3.7m, lies 0.4 mile N of the point.

**Hickmans Harbor** (48°06'N., 53°45'W.), on the N side of the arm, has a least fairway depth of 14.6m. Gooseberry Island lies in mid-channel of the entrance. The public wharves are along the W shore of the harbor, about 0.4 mile within the entrance. The N wharf has a least depth of 5.2m. The S wharf has a depth of 4.9m. The center wharf has a depth of 4m.

**The Tolt** (48°05'N., 53°46'W.) is a conspicuous conical hill rising on the S side of the arm.

At **Lady Cove** (48°06'N., 53°51'W.), there is a wharf with a depth of 5.2m alongside. Bald Nap Shoal, with a depth of 0.9m, and Fosters Rock (Forster Rock), which dries 0.4m, lie off Bald Rock Point and **Fosters Point** (Forster Point) (48°07'N., 53°53'W.), about 1 mile apart. A lighted bell buoy is moored about 0.6 mile SSW of Fosters Point. The shore between Fosters Point and the head of the arm consists of shale cliffs backed by high, wooded terrain. **Bluff Point** (48°08'N., 53°55'W.) is a conspicuous eminence. Red Man, an islet, lies close N of the point. **Red Point Hill** (48°10'N., 53°58'W.) is another conspicuous summit.

**6.29** Clarenville (48°09'N., 53°57'W.) (World Port Index No. 1611) is the site of a creosoting plant, a lumber yard, and an asphalt plant. There is also an oil terminal in town.

**Depths—Limitations.**—Newfoundland Hardwoods, Ltd. maintains a jetty, 113m long, with depths of 2 to 7.1m along-side the outer 95m of the N side of the wharf and 2 to 6.5m alongside the outer 95m of the S side of the wharf. The berth, situated about 0.2 mile N of Red Point, on the N side of Clarenville, is exposed to weather and great care must be taken to ensure that the vessel is secured adequately.

A public wharf, 47m long, has a depth of 5m at its head. The dockyard wharf, 47m long, has a depth of 4.9m at its outer end. A dolphin berth, for tankers, has been reported (1996) to be in ruins.

The maximum size vessel that can be accommodated is 196m long and 25.6m wide, with a deep draft of 7.9m.

**Aspect.**—Lights are shown from masts atop dolphins situated off the public wharf. A conspicuous tower, 233m high, and marked by red aircraft obstruction lights, stands 0.6 mile W of the outer end of the public wharf.

**Pilotage.**—Pilotage is not compulsory, but is available. Pilots for Clarenville are boarded at the entrance to **Random Sound** (48°04'30"N., 53°35'00"W.) and also off St. John's in position 47°33'42"N, 52°37'54"W. The vessel's ETA should be sent to the Atlantic Pilotage Authority 12 hours in advance. The ETA should be confirmed or amended 4 hours in advance.

**Anchorage.**—Anchorage can be taken in Northwest Arm, N of the prohibited anchorage area, in depths of 12.8 to 20.1m, good holding ground.

# Trinity Bay—West Side—Random Sound to Horse Chops

**6.30** Random Head Harbor (48°06'N., 53°33'W.) is entered between East Random Head and Pigeon Island, lying 0.5 mile N. A reef extends 0.15 mile SE of the island, terminating in Mouse Rock, awash; a rock, with a depth of 2.3m, lies 0.3 mile W of Mouse Rock. The harbor is foul and not recommended, except along its N side.

**East Head** (48°08'N., 53°32'W.), the N side of which is a cliff, is located 0.75 mile E of Long Point. This point and **Flat Rock Point** (48°08'N., 53°34'W.) form the entrance to **Deer Harbor**, suitable for small vessels. The entrance to the inner harbor has a limiting depth of 4m. A public wharf, 27m long, has an alongside depth of 5.2m at its outer end. The harbor freezes over in February, with the ice breaking up in late April.



### Clarenville

**Long Cove** (48°09'N., 53°33'W.), entered by small vessels, has an entrance constricted to 90m by a 1.8m shoal. There are depths of 7.3 to 31.1m in the cove.

**6.31** Little Harbor (48°10'N., 53°33'W.), located at the N end of a stretch of coast consisting of low cliffs backed by flattopped hills, has an entrance constricted by an islet on the N side and a rock, awash, off the S entrance point. There is a depth of 11m within the harbor.

**Northwest Arm** (48°11'N., 53°33'W.) is located close SW of **Bakers Loaf** (48°11'N., 53°32'W.), a remarkable high peak dominating the NE part of Random Island. The entrance

channel to the arm has a depth of 12.8m over a width of about 135m.

**Anchorage.**—Anchorage can be taken in Northwest Arm by small vessels, in 16.5m, mud.

**Caution.**—The E side of Random Island is fronted by numerous islets, rocks, and reefs. Verge Island (48°07′N., 53°33′W.) lies 0.25 mile offshore. A chain of rocky islets terminating in Black Rock extends 0.5 mile N from the island. **Deer Rock** (48°08′N., 53°31′W.), the outermost danger in the area, has a depth of 1.2m. The sea generally breaks over this rock, except at HW and fair weather.

North Bird Island and South Bird Island lie 1 mile and 0.5 mile N, respectively, of East Head. **Duck Island** (48°10'N., 53°29'W.) has two peaks separated by a valley running lengthwise. Shag Islets lie within 0.3 mile N of Duck Island.

**Smith Sound** (48°10'N., 53°40'W.), lying between the mainland and the N side of Random Island, is entered between **Bonaventure Head** (48°17'N., 53°24'W.) and Ireland's Eye Point, a steep cliff located 3.75 miles SW of the head. Smith Sound extends about 17 miles W to its head, where it joins the head of Northwest Arm. Depths in the sound are great to within 4 miles of its head and it varies in width from 0.5 to 1.5 miles. The shores in the lower reaches are steep-to and the only anchorages recommended are in the small harbors near the entrance.

**Ice.**—The sound freezes in severe weather about February 10, with the ice breaking up between April 10 and 20.

**Caution.**—Submarine cables are laid from seaward through the sound and landed at **Snooks Harbor** (48°10'N., 53°52'W.).

**6.32 Bonaventure Head** (48°17'N., 53°24'W.) is a high, bold bluff fringed by several precipitous rocks. **Ireland's Eye Point** (48°14'N., 53°29'W.) is the N extremity of **Ireland's Eye** (48°13'N., 53°30'W.), an island steep and rocky with several conspicuous peaks, lying in the entrance of Smith Sound.

**Anthony Island** (48°13'N., 53°29'W.) is separated from Ireland's Eye by a deep channel. The **Ragged Islands** (48°14'N., 53°27'W.), barren, and on which a light is shown from a tower, include Ragged Rock, which dries, and lies 0.4 mile S of the light structure.



Courtesy of Newfoundland Interactive
New Bonaventure Harbor

**Old Bonaventure Harbor** (48°17'N., 53°26'W.) and **New Bonaventure Harbor** (48°17'N., 53°28'W.) are small inlets where there are settlements and wharves. There is anchorage in the old harbor. The wharf in the new harbor has a least depth of 5.5m alongside. At **Kerleys Harbor** (48°17'N., 53°29'W.) there is good, but confined anchorage for small vessels.

**6.33 British Harbor** (48°15′N., 53°31′W.), an inlet extending 1 mile N from the entrance points, affords anchorage to small vessels, in depths of 18.3 to 21.9m, mud. The coast

for 1.25 miles NE of the entrance consists of a conspicuous flattopped cliff.

**Popes Harbor** (48°14'N., 53°34'W.), an inlet, is encumbered with above and below-water rocks. Indian Lookout, a prominent, high hill with a steep cliff forming the summit, rises close W of the harbor entrance. The deep-water entrance channel extends 0.1 mile on each side of an above-water rock.

**Anchorage.**—Anchorage for small vessels can be taken, in depths of 3.7 to 9.1m, mud.

**Hickman Harbor** (48°13'N., 53°35'W.), a narrow, foul inlet, is fronted E by the Hickman Islands, a group of islets and rocks extending 0.25 mile offshore. A depth of 3.7m lies about 0.2 mile WSW of the S end of the largest island.

**Tilton Head** (48°10'N., 53°42'W.) is a high bluff on the N side of the sound. Several small coves located on the S side and opposite the head, have wharfs with depths up to 3.7m alongside.

**Burgoyne's Cove** (48°10'N., 53°43'W.) affords temporary anchorage from strong winds, in a depth of 21.9m, about 0.2 mile offshore.

**Smith Point** (48°11'N., 53°50'W.) rises to an eminence within the point. The coastal terrain NW of the point is high and wooded. **Snooks Harbor** (48°10'N., 53°52'W.) has depths of 18.3m mud. There are several, small wharfs in the cove. The coast E for 4.5 miles is steep and often cliffy. From Snooks Harbor to **Grindstone Head** (48°13'N., 53°56'W.), the shore is mostly shale cliffs.

**The Bar** (48°13'N., 53°57'W.), a constricted channel with a depth of 0.6m, connects the head of Smith Sound with the head of Northwest Arm (Random Sound). A road bridge, with a vertical clearance of 4.6m, spans the channel.

**6.34** Trinity Harbor (48°22'N., 53°22'W.) (World Port Index No. 1610), considered one of the best in Newfoundland, is entered between **Fort Point** (48°22'N., 53°21'W.) and **Skerwink Head** (48°22'N., 53°20'W.). The harbor is sheltered by hills. Skerwink Head, rising to a high hill inland, is the extremity of a broad peninsula and is located 0.25 mile W of Skerwink Rocks. Fort Point is the termination of a narrow peninsula extending N from **Salvage Head** (48°21'N., 53°21'W.), which rises inland to a high hill.

Ice.—Trinity Harbor freezes over about the end of January, and is closed at intervals by ice, about 0.5m thick, until the end of April. Drift ice appears about the middle of April and dissolves about the end of April. The earliest date of a vessel arriving was March 5; the latest date of departure was January 21. A SW wind clears the harbor sufficiently for vessels to enter within 24 hours. Between Skerwink Head and Horse Chops, there is often a straight edge of ice, and if SE winds prevail, the ice in the bight outside Trinity Harbor is held in for some time, but N or NW winds clear it out.

**Depths—Limitations.**—The controlling depth in the entrance of Trinity Harbor is 20.1m; the controlling depth is 14.6m in Northwest Arm and in 10m in Southwest Arm. West Arm is for small craft.

Wharfs are situated at Trinity, W of Nuddick Point, and at the head of a cove entered NW of **Job's Head** (48°22'N., 53°21'W.). The public wharf is 27m long, with depths of 2.4 to 6.1m alongside the E side and 4m at the N end. A wharf, in

ruins and awash, lies close S of the public wharf. A dangerous sunken wreck lies 122m NE of the public wharf. The wharf of Job's Head has depths of 3 to 5.4m alongside.

**Aspect.**—Rider Hill, the conspicuous summit of a rocky peninsula, is located almost 1 mile NW of Fort Point. The peninsula divides the harbor into Southwest Arm and Northwest Arm. A conspicuous white church, with a pointed spire, stands 0.2 mile SSW of Nuddick Point, the NE extremity of the peninsula. There is another church spire 135m farther SSW.

**Anchorage.**—There is anchorage in Trinity Harbor, in a depth of 27.4m, nearly 0.3 mile W of Fort Point; anchorage also available, in depths of 25.6 to 27.4m, about 0.5 mile N of Nuddick Point.

Southwest Arm, entered between Fort Point and Nuddick Point, affords fair anchorage, in a depth of 20.1m, mud, about 0.2 mile from its head. The village of Dunfield lies at the head of the S extension of Southwest Arm.



Courtesy of Dylan Ziedrich and the Official Newfoundland Links Page **Dunfield** 

Northwest Arm, entered N of Nuddick Point, contains several coves of which Cap Cove, located NW of Rider Hill, is the largest. There is good anchorage in Cap Cove, in 20.1m, mud, sheltered from all winds.

**Caution.**—Admiral Island and Herring Rocks lie on fringing shoals extending along the peninsulas at the harbor entrance. **Mussel Rock**, with a depth of 2.4m, lies 0.15 mile NW of Fort Point.

**6.35 Robinhood Bay** (48°22'N., 53°19'W.) is entered between Skerwink Head and **Fox Head** (48°22'N., 53°18'W.), the high S extremity of a peninsula. Fox Rock, with a depth of 5.2m, lies 230m S of the point. Depths in the bay vary from 11m to over 36.6m. There is an 11m detached patch in the middle of the fairway opposite **Herring Cove** (48°23'N., 53°19'W.).

At **Port Rexton** (48°23'N., 53°20'W.), there is a ruined wharf extending 25m from shore.

**Anchorage.**—Anchorage can be taken, in depths of 12.8 to 31.1m, in the bay.

**Champney's Cove** (48°23'N., 53°18'W.) is entered between Salmon Point and **Huzzie Head** (48°23'N., 53°17'W.), about 0.3 mile NE. Depths vary from 16.5m at the entrance to 9.1m at the head of the cove. The cove is clear of dangers in midchannel. There is a wharf on the W side of the cove, about 0.5 mile NW of Salmon Point, that has a depth of 4.3m alongside.

**Anchorage.**—Anchorage for small vessels can be taken at the head of the cove, in a depth of 9.1m.

**English Bay** (48°22'N., 53°17'W.) is entered between Huzzie Head and **English Head** (48°22'N., 53°16'W.). English Harbor, a settlement at the head of the bay, has two prominent churches, one with a spire. There is a pier with a depth of 3m alongside; the wharf was reported (1996) to be in disrepair.

**Horse Chops** (48°21'N., 53°13'W.), the NW entrance of Trinity Bay, is an overhanging cliff rising to a saddle-shaped hill. Flat Rock, a detached islet, lies close off the cliff. A fog signal is sounded from Horse Chops.

### **Horse Chops to North Head**

**6.36** Norther Point (48°24'N., 53°09'W.) is a high, steep, and conspicuous bluff located at the SW extremity of a range of hills which back a series of low bluffs fronting the tableland composing the coast as far as South Head (48°28'N., 53°03'W.). The latter head is wedge-shaped and rises to a conspicuous summit.

**Low Point** (48°25'N., 53°07'W.) is low, shelving, and fringed with above-water rocks. The area for 0.3 mile S of the point has a least depth of about 5.5m. Foul ground extends 0.35 mile E and 1 mile ENE of South Head.

**Caution.**—A restricted area, with a radius of 0.5 mile, lies 2 miles ENE of South Head. The area is used for the sinking of surplus vessels.

**Melrose Harbor** (48°29'N., 53°04'W.) is a cove suitable only for small vessels. The harbor is fronted by the Ragged Islands and Ragged Rocks, which lie as far as **Morris Rocks** (48°30'N., 53°02'W.). Shag Rock, above-water, lies 0.15 mile E of the S entrance point of Melrose Harbor.

Range lights, in line bearing 314°30", lead N of Shag Rock and into the harbor in a least depth of 4m. The lights are shown from skeletal towers at the head of the harbor.

**6.37** Catalina Harbor (48°30'N., 53°05'W.) (World Port Index No. 1600) is entered between **Burnt Point** (48°30'N., 53°03'W.) and **Shepherd Point** (48°31'N., 53°04'W.). The harbor consists of two arms; Northeast Arm, the site of the town of Catalina, and Southwest Arm, the location of Port Union. Both towns are the center of a large fishing industry.

**Winds—Weather.**—After gales, a swell sets into the harbor, but it is not heavy enough to endanger vessels. The normal navigation season is from April to February.

**Ice.**—Ice is irregular in its arrival, seldom appearing until the middle of January and often not before February 10. The ice disperses between April 10 and 20, but it has remained up to June 10. Winds between the SW and WSW often break up the ice.

**Depths—Limitations.**—There are several isolated rocks, on which the sea breaks in heavy weather, lying in the approaches

to the harbor. They are **Murphy Rock** (48°32'N., 52°59'W.), **Soldier's Rock** (48°31'N., 52°58'W.), **Joe's Rock** (48°31'N., 52°59'W.), and **Feather Shoal** (48°29'N., 52°57'W.).

**Poor Shoal** (48°31'N., 53°01'W.), with a least depth of 5.8m, is an extensive shoal lying NE of Burnt Point. The sea breaks heavily on this shoal in bad weather. **Brandies Shoal** (48°31'N., 53°02'W.), between Poor Shoal and Burnt Point, consists of two heads with depths of 1.2m. The sea usually breaks on this shoal.

The entrance channel, formed between Burnt Point and Brandies Shoal, is about 135m in width and has a least depth of 9.1m. Depths of 5.5 to 9.1m are found in both arms.

In Catalina, about 0.4 mile NW of Manuel Island Light, an irregularly shaped fishing wharf has depths of 3.7 to 5.5m. A 37m long wharf extends to the S, with depths alongside of 4 to 4.9m.

The public wharf extends from the shore close S of the fish plant and has depths of 4.6 to 6.1m.

Irving Oil Company jetty is situated in Southwest Arm. Depths of 4.9m are found alongside.

In addition, there are several smaller wharves and jetties situated around Northeast and Southwest Arms.

**Aspect.—Green Island** (48°30'N., 53°03'W.), rugged and rocky, lies on encircling shoals S of the entrance channel and SE of Burnt Point. A light is shown from the E side of the island. Burnt Point Light (Catalina Light), NW of Green Island, is shown from the S side of the entrance.

An overhead power cable, with a vertical clearance of 7.6m, crosses from the W side of Green Island in a 282° direction to the mainland.

Several churches are conspicuous near the shores of both arms of the harbor. Three white towers stand on the SE shore of Southwest Arm, and a church spire is prominent close S. A green dome and monument appear near the head of Southwest Arm.

**Courages Point** (48°30'N., 53°05'W.), backed by Snelgroves Hill, is conspicuous, as are two church spires at the bottom of the hill.

**Pilotage.**—Pilotage is not compulsory; however, a pilot can be arranged by giving 24 hours notice of requirement to "Pilots, St. John's". The pilot will board off St. John's in position 47°33'42"N, 52°37'54"W, or off Catalina Harbor, provided the vessel's local agent arranges for a boat to embark the pilot.

**Anchorage.**—Northeast Arm affords anchorage for small vessels, in a depth of 3.7m, mud. Larger vessels can anchor off the entrance of Southwest Arm in depths of 9.1m. Off Port Union, there is anchorage in 7.3m, mud.

**Directions.**—The harbor opens into Northeast Arm and Southwest Arm close within **Goodland Point** (48°31'N., 53°04'W.). Manuel Island, close W of the point, is marked by a light shown from a white circular tower. Outer range lights are situated at the head of Shepherds Cove, close W of the point. These lights, in line bearing 297°10', lead through the entrance channel to Burnt Point. Inner range lights are situated on Courages Point. These lights, in line bearing 252°, lead from the intersection of the outer range through the inner harbor. There are several rocks lying near the inner range alignment; buoys mark these dangers. A dredged channel, with a least depth of

5.5m and marked by lighted buoys, leads N into Northeast Arm from a position 0.15 mile W of Manuel Island.

**Caution.**—Vessels should not approach Catalina Harbor closer than 7 miles in heavy weather or at night.

A submarine pipeline extends 283m, bearing 105°, from the outer end of the pier extending from the fishery products wharf.

**Port Union** (48°30'N., 53°05'W.) (World Port Index No. 1605) is a fishing town situated along the shores of Southwest Arm in Catalina Harbor. Landmarks are described with Catalina Harbor, as is the anchorage off the wharves. Several wharves and piers, with depths of up to 4.9m, are situated along the shores of Port Union.

### North Head to Cape Bonavista

**6.38** North Head (48°33'N., 53°00'W.) is a conspicuous headland, fronted by cliffs. Little Catalina Harbor (48°32'N., 53°03'W.) is a boat harbor with a conspicuous church spire at its head, and several small piers along its E side.

**Off-lying dangers.**—Several detached, rocky shoal patches of 7.3 to 14.6m, on which the sea breaks after E gales, lie as far as 6 miles E of North Head. **The Haypooks** (48°34′N., 52°52′W.), with a least depth of 7.3m, are the E of these dangers. In heavy weather and at night, vessels should pass E of the Haypooks.

The Skerries, a shoal area with a least depth of 12.2m, lies about midway between North Head and The Haypooks.

**Whalesback** (48°35′N., 52°59′W.), a drying rock, lies almost 0.8 mile SSE of **Flowers Point** (48°36′N., 53°00′W.). Flowers Rock, with a depth of 1.5m, lies at the NE extremity of shoals extending almost 1 mile NE of the point. North Offer Rock, with a depth of 14.6m, lies about 1.8 miles farther NE.

**South Bird Island** (48°37'N., 53°00'W.) and North Bird Island, about 0.8 mile apart, lie in a foul area off **Elliston Point** (48°38'N., 53°02'W.), the SE entrance point of Elliston Cove. A depth of 7.3m lies about 0.5 mile NE of the S tip of North Bird Island. The cove has depths of up to 12.8m. Piers, with depths alongside of up to 3m, are situated on the W and S shores, respectively. A church spire at the head of the cove is conspicuous.

**Anchorage.**—Temporary anchorage can be taken, in a depth of 12.8m, sand. The cove affords no shelter, but it is reported that, because of backwash, a vessel may ride here securely even during E winds.

**6.39** Cape L'Argent (48°39'N., 53°02'W.) is a shelving point separated from the mainland by a deep fissure. Three islets lie close off the point. L'Argent Hill, 0.75 mile W of the cape, rises about 119m above the flat cliffs forming the coast and is conspicuous. It is separated from Burnt Ridge to the S by a deep valley.

**Dollarman Bank** (48°40'N., 53°00'W.) is an irregular, rocky bank extending as far as 4 miles offshore between South Bird Island and Cape Bonavista, about 5.5 miles NW. There are numerous rocks on this bank, with depths of 9.1 to 18.3m, on which the sea breaks after E gales. Other detached rocks and

ledges, best seen on the chart, lie between the bank and **Cape Bonavista** (48°42'N., 53°05'W.).

**Spillars Point** (48°40'N., 53°03'W.) is fronted by a group of rocky islets and Spillars Ledge, the latter with a least depth of 4.9m. The coast to Cape Bonavista is heavily indented and fringed by foul ground with drying rocks. **Brandy Rocks** (48°42'N., 53°04'W.), with a least depth of 8.8m, lie 1 mile E of Cape Bonavista.

**Burnt Ridge** (48°38'N., 53°04'W.), a tableland 140m high, is the most remarkable feature on this section of the coast. It is 4.5 miles S of Cape Bonavista.

Upon approaching the coast, L'Argent Hill becomes visible, then Cape Bonavista and **Gull Island** (48°43'N., 53°06'W.). From the NE, the first land seen in clear weather is **Green Ridge** (48°39'N., 53°04'W.), the N part of Burnt Ridge; otherwise, Cape Bonavista Light will be sighted first.

## Bonavista Bay—Cape Bonavista to Western Head

**6.40** Cape Bonavista (48°42'N., 53°05'W.) consists of flat, almost barren rock. It is the N extremity of a promontory, about 1.5 miles long, projecting N from the mainland. Cape Bonavista is about 3.8 miles NE of the entrance to Bonavista Harbor.

A light is shown from a tower on the E side of the cape. There is a disused, square light structure nearby; a loran tower stands 0.4 mile S of the cape.



Cape Bonavista Light

Cape Bonavista to **Western Head** (48°37'N., 53°26'W.) is considered the SE part of Bonavista Bay, which extends 38 miles NNW to **Cape Freels** (49°16'N., 53°30'W.).

**Ice.**—The harbors in Bonavista Bay freeze over at intervals between January 20 and March 20, and are closed at intervals by ice about 0.3m thick from January to May. Drift ice appears about February 15 and disappears towards the end of May. The navigation season is from May 1 to December 20, but coastal vessels may frequent the harbors throughout the year.

The deep arms between Clode Sound and Eastport Bay generally freeze about the middle of April.



Cape Bonavista Light

**6.41 Off-lying dangers.—Gull Island** (48°43'N., 53°06'W.), and a rock with a depth of 3m lying 0.1 mile SW of the island, lie off Cape Bonavista.

Harrys Ground (48°47'N., 53°05'W.), an extensive rocky bank lying as far as 6.5 miles N of the cape, has depths varying between 1.8m on Old Harry (48°46'N., 53°05'W.) to 7.3m on Young Harry (48°48'N., 53°04'W.). Other rocks, below-water, between the cape and Harrys Ground, are best seen on the chart. A moderate sea breaks on rocks with depths of less than 9.1m; a heavy sea breaks on those with depths of 9.1 to 18.3m. After gales, the sea breaks on those rocks with depths of 18.3 to 27.4m.

**Green Island** (48°24'N., 53°06'W.), lying 0.5 mile W of the cape, is separated from the mainland by a channel with a least depth of 3.4m.

**Stone Island** (48°24'N., 53°08'W.) lies on foul ground about 1.3 miles W of Green Island. The channel between the islands is deep and clear of dangers.

**6.42 Bonavista Harbor** (48°39'N., 53°07'W.) (World Port Index No. 1595) is entered between Squarry Island, the N entrance point, and Canaille Point, almost 0.5 mile SE of the island.

Breakwaters constructed within the outer harbor form a safe inner harbor for fishing craft. A road extends over the N breakwater to a wharf on the inner side of the breakwater.

**Depths—Limitations.**—The depths alongside the wharf on the inner side of the breakwater range from 2.7 to 5.6m. The public wharf, on the NE corner of the harbor, has a length of 82m with alongside depths of 1.3 to 3.1m. Another wharf, with a length of 64m and alongside depths of 1.3 to 2.8m, extends NW from the inner end of the public wharf. There is a fish plant wharf, close S of the public wharf, with a length of



Courtesy of Town of Bonavista

Bonavista Inner Harbor



Bonavista Harbor

70m and alongside depths of 1.2 to 5.2m. Swyers Wharf, close S of the fish plant wharf, is in ruins.

Mockberger Wharf, extending from the N shore of the harbor, has a length of 55m and a depth alongside of 2.7m.

Swyers Wharf, 49m long and situated close S of the fish plant wharf, has a depth of 4m at its outer end.

**Aspect.**—A conspicuous monument stands on a hill about 0.5 mile SE of the point. A light is shown from a square tower on the S end of Squarry Island; another light is shown from a mast on the outer end of the S breakwater. Lighted Whistle Buoy JB is moored about 0.6 mile WSW of Squarry Island, the latter joined to the N shore of the harbor by a breakwater.

**Anchorage.**—Anchorage for small vessels can be taken during the summer, in a depth of 12.8m, about 0.2 mile SE of Squarry Island.

**Directions.**—A vessel approaching Bonavista Harbor from the NE should round Gull Island at a distance of 0.5 mile. From a position about 0.5 mile W of Gull Island, a vessel should steer SSW, keeping the NW extremity of Gull Island bearing more than 037° astern and open NW of the NW edge of Green Island, until Squarry Island bears 120°.

**Caution.**—Fishing nets may be encountered during the fishing season in the approaches to the harbor.

**6.43 Blackhead Bay** (48°35'N., 53°15'W.) is entered between **Black Head** (48°38'N., 53°10'W.) and **Southern Head** (48°37'N., 53°21'W.). The bay, indented by numerous coves affording little shelter, is open and clear of dangers.

**Newmans Cove** (48°35'N., 53°12'W.), exposed to NW gales, has a settlement situated along the NE shore of the cove, where a church spire and church tower are conspicuous. A public pier, with a depth of 3.4m alongside, extends from the E shore of the cove.

**Kings Cove** (48°34'N., 53°19'W.), small and open NE, is entered S of **Kings Cove Head** (48°35'N., 53°19'W.). Fishing settlements line the shores of the cove. Two church spires are prominent. There is a small wharf with a depth of 4.9m alongside. Anchorage can be taken throughout the cove by small vessels with local knowledge.

**Broad Cove** (48°36'N., 53°21'W.) is entered between the NW end of Broad Head and **Southern Head** (48°37'N., 53°21'W.), a steep cliff rising to a very high hill. A church spire is conspicuous within the cove. Pigeon Ledge, with a least depth of 6.7m, lies over 0.75 mile E of Broad Head. **Cary Rock** (48°38'N., 53°23'W.), with a depth of 3.7m, lies 1.25 miles WNW of Southern Head. Other dangers lie closer inshore. The coast from Southern Head to Western Head is indented by coves affording shelter with local knowledge during the summer. The coves and approaches are encumbered with rocks.

### Bonavista Bay—Western Head to Cow Head

**6.44 Western Head** (49°37'N., 53°26'W.) is the N extremity of a bold, barren promontory, narrow and steep on both sides. Numerous rocks, with depths of 9.1 to 18.3m and on which the sea breaks at times, lie within 2 miles of this headland and raise a confused sea in bad weather. Bacon Bone Rock, with a depth of 0.6m, lies 1.25 miles WSW of the head. The coast SSW is steep and bold.

**Arch Cliff Point** (48°35'N., 53°29'W.) and **Plate Cove Head** (48°31'N., 53°30'W.) are coastal features, as is **Red Cliff Island** (48°34'N., 53°30'1"W.) The latter is conspicuous because of its red and yellow rocks. Western Rock, which dries and is marked by a lighted buoy, lies 0.25 mile SW of Arch Cliff Point.

**Open Hall** (48°33'N., 53°29'W.), a cove with a village, has a wharf which extends from the NW shore of Open Hall and has 4.6m alongside at its outer end.

**Plate Cove** (48°30'N., 53°29'W.), entered E of Plate Cove Head, has a settlement along the NW shore where there are two shallow water piers. Fair anchorage can be taken in the S part of the cove.

**Southern Bay** (48°29'N., 53°33'W.), over 55m deep, affords no convenient anchorage. There are settlements on Indian Arm, an inlet on the E side of the bay, and at the head of the bay where there is a shallow water wharf.

Two communications towers on the E side of Indian Arm is conspicuous from much of Southern Bay.

**Sweet Bay** (48°29'N., 53°38'W.) is entered between **Cutler Head** (48°32'N., 53°36'W.) and **Chance Head** (48°32'N.,

53°38'W.). The inner part of the bay is divided into two arms by a rugged promontory. Chance Island lies 0.75 mile NE of Chance Head. A ledge, with a depth of 1.5m, lies 1.5 miles NE of Chance Head. **Gull Island** (48°31'N., 53°36'W.), with Turfpook Island close S, lies off the E side of the bay. The W side of the bay is indented and fronted by islets. A settlement within the E arm has a small pier with a depth of 3m at its head.

**Great Chance Harbor** (48°31'N., 53°40'W.) is 0.15 mile wide and 18.3 to 29.3m deep. Local knowledge is required to enter.

The **Long Islands** (48°35'N., 53°37'W.) are a group of four islands extending 0.5 to 5.5 miles E of **Hurloc Head** (48°34'N., 53°43'W.). The channel between this headland and the islands is deep and clear of dangers. Above and belowwater rocks lie as far as 0.75 mile off the NW side of the group. **Puttick Rock** (48°36'N., 53°35'W.) is a detached danger with a depth of 7.5m.

**Chandler Reach** (48°30'N., 53°45'W.) is entered between Chance Head and the SE extremity of the E Long Island, about 2.7 miles NE. **Deer Island** (48°33'N., 53°39'W.), lying 1 mile W of Chance Head, is separated from the coast by a narrow channel with a depth of 11m. The outer part of the reach affords temporary anchorage with local knowledge.

**Park Harbor Hill** (48°31'N., 53°51'W.) and **Minchin Island** (48°30'N., 53°48'W.) are both conspicuous on approaching the reach from seaward.

Park Harbor is entered by the SW corner of Lions Den. There is a jetty for small craft with depths of 0.9 to 1.8m.

**6.45** Goose Bay (48°27'N., 53°49'W.), the S continuation of Chandler Reach, is entered close E of Connecting Point (48°28'N., 53°53'W.). The shores of the bay are fringed with foul ground, but the main part is free of dangers.

From the E side of the bay, an L-shaped public wharf, with an outer end 26m long, has a depth of 6.7m alongside. On the SW side of the bay, another public wharf, with an outer end 21m long, has depths of 3 to 3.7m.

On the W shore there is an L-shaped public wharf, with an outer end 18m long and a depth of 4.3m alongside.

Anchorage can be taken, in depths of 7.3 to 25.6m, between a position 0.4 mile W of **Goose Head** (48°24'N., 53°52'W.) and the head of the bay.

**Clode Sound** (48°28'N., 53°54'W.), the SW continuation of Chandler Reach, is entered close W of Connecting Point. The SE side of the sound is steep-to and affords no anchorage as far as Bunyan's Cove, about 8.5 miles SW of Connecting Point. The sound is clear of dangers. **Ochre Pit Hill** (48°29'N., 53°56'W.) is conspicuous from seaward.

Submarine cables are laid between Bunyan's Cove and **Charlottetown** (48°26'N., 54°00'W.), a settlement at which there is a pier with a depth of 6.4m alongside.

**The Narrows** (48°25'N., 54°05'W.) of the sound leaves a passage 0.25 mile wide, which is clear of dangers and has a depth of 14.6m in the fairway. The SE shore of this passage is steep-to; the NW shore is fringed by rocky shoals. Two islets, 2.4 and 3.7m high, lie on a shoal spit extending from the S side of The Narrows and leaving a passage 0.25 mile wide.

Bread Cove and Dumpling Cove, located close together, are entered on the NW side of Clode Sound, about 3.5 miles W of Connecting Point. Both coves are rocky, but afford anchorage to small vessels in depths of 7.3m over a bottom scattered with boulders. Local knowledge is required.

At **Love Cove** (48°24'N., 54°03'W.), there is anchorage, in a depth of 14.6m. Good anchorage is available near the head of the sound, in depths of 5.5 to 27.4m, and also on either side of **Bryans Hole Point** (48°26'N., 54°00'W.).

**6.46** Newman Sound (48°35'N., 53°49'W.) is entered between the NE extremity of the easternmost Long Island and Little Harbor Head (48°40'N., 53°36'W.), the E end of Richards Island. Hammer Head (48°39'N., 53°37'W.) is a remarkable cliffy cone standon the E end of Keats Island. Swale Island (48°36'N., 53°44'W.) lies near the middle of the sound. Mount Stamford (48°34'N., 53°54'W.) is a conspicuous landmark as seen from seaward. Swale Tickle (48°35'N., 53°46'W.), the passage SW of the island, is foul at its W entrance, although a channel about 90m wide and 8.2m deep is available off the SE end of Swale Island.

**Happy Adventure Bays** (48°38'N., 53°45'W.), constricted, has a shallow water pier. A light is shown from a mast on the head of the pier.

Buckley Point and **Buckley Cove** (48°35'N., 53°54'W.) are located where the sound is most constricted. The depths are considerable for 2 miles within the narrows, then decrease rapidly to the head, where there is a wharf for the use of small craft.

**Anchorage.**—Anchorage can be taken in Buckley Cove, in a depth of 7.3m, also in **South Broad Cove** (48°34′N., 53°51′W.) in depths from 36.6 to 5.5m, good holding ground, mud.

**Gerrards Hill** (48°41'N., 53°39'W.) is the summit of the promontory separating Newman Sound from Eastport Bay (Salvage Bay). Several small inlets indent the seaward side of the promontory. **Little Denier Island** (48°41'N., 53°35'W.), lying 1.25 miles off the promontory, is marked by a light shown from a round tower painted in red and white stripes. Tilly's Hill stands about 2 miles SW of the island. Offer Rock, awash, lies 0.75 mile NE of Little Denier. The seas break on the rock.

The **Shag Islands** (48°42'N., 53°37'W.) lie 1.75 miles NW of Little Denier Island.

### Bonavista Bay—Cow Head to Shoe Cove Point— Outer Part

**6.47 Cow Head** (48°42'N., 53°39'W.), the N end of a promontory which terminates in North Point, a steep, bold cliff about 0.5 mile S. The coast between Cow Head and Shoe Cove Point, about 20 miles N, is indented by numerous bays and inlets which can be approached through several channels between the various off-lying islands and dangers fronting the coast. Between Cow Head and Lewis Head (48°58'N., 53°44'W.) lie numerous islands and rocks; only the most important will be described.

**Ship Island** (48°45'N., 53°38'W.), rising to a high hill, is the E of a group of islands extending W to **Morris Island** (48°45'N., 53°44'W.). Morris Channel, lying between the island and its off-lying dangers, extends W to its junction with Bloody Reach and has depths in the fairway of 12.8 to 91m.

Brown Stone and Athwart Islets lie in the E entrance of Morris Channel.

**Bruce Cove Rock** (48°45'N., 53°49'W.), with a depth of 1.5m, is steep-to and lies in the W entrance of Morris Channel. The passage NE of the rock is preferable. The **Pitt Islands** (48°45'N., 53°46'W.) are a group forming the N side of the W entrance to the channel.

**6.48 Varket Channel** (48°46'N., 53°45'W.) lies between Morris Island and Willis Island (48°48'N., 53°41'W.). It joins Morris Channel and Willis Reach in its W part. The Samson Islands lie as far as 3 miles E of Willis Island. Most of these islands appear flat, except for the largest which looks like a wooded hill. **Puffin Island** (48°47'N., 53°36'W.), marked by a lighted tower, is the E of the group of islands. **Ship Rock** (48°46'N., 53°37'W.), with a depth of 2.5m, lies about 1.8 miles SSW of Puffin Island. **Varket Islet** (48°46'N., 53°43'W.), in the middle of the channel, rises to two conical hills. A sunken rock lies close SW of the islet. **Coward Island** (48°48'N., 53°39'W.) has a pier with a depth of 3.4m at its outer end.

Willis Reach (48°49'N., 53°41'W.) is entered between Great Black Island (48°49'N., 53°37'W.) and Gulch Island (48°50'N., 53°36'W.). The channel extends W between the N side of Willis Island and the SE side of Cottel Island. Saint Rock (48°50'N., 53°32'W.), with a depth of 5.1m, is the outermost danger off the entrance to Willis Reach. There are no dangers in the fairway of the reach, except for two 9.4m shoals 0.6 mile NNW, and a 4.2m patch 0.2 mile N, respectively, of the N extremity of Willis Island. From a depth of 200m in the entrance, the depths decrease to 14.6 to 18.3m at the W end, where the reach branches into several channels between the islands.

The **Gooseberry Islands** (48°52'N., 53°37'W.) are a group consisting of inner and outer islands and numerous islets and rocks lying between them, extending 8 miles NE of **Cottel Island** (48°51'N., 53°40'W.). The inner islands are rather flat. A light is shown from the S end of the innermost island. **Offer Gooseberry Island** (48°56'N., 53°32'W.), the outermost and most conspicuous of the group, appears as a triple-peaked island.



Offer Gooseberry Island bearing 277°, distant 6 miles

**Malone Rock** (48°52'N., 53°30'W.) and **Shark Rock** (48°57'N., 53°28'W.), the former 0.6m above-water, the latter 6.1m below-water and on which the sea breaks, are the outermost dangers in the vicinity of the Gooseberry Islands. Anstead Rock lies 1.25 miles N of Offer Gooseberry Island and has a depth of 11m. A detached 5.8m rock, which is the W danger, lies 1 mile WNW of Offer Gooseberry Island.

**Directions.**—Hare Cut Point, the N extremity of Cottel Island, bearing 224° and open of the NW extremity of Inner Gooseberry Island, leads clear of the dangers described above between Offer Gooseberry Island and Coleman Islet, on the

SE, and Anstead Rock and the 5.8m rock, on the NW, towards Inner Gooseberry Island.

**Mole Cove** (48°53'N., 53°39'W.), at the NE end of Cottel Island, is marked by a light shown from a white, square tower standing on the W entrance point of the cove. There is a wharf, with a depth of 6.7m alongside, situated at the head of the cove. Anchorage can be taken, in depths of 9.1 to 16.5m, rock, in Mole Cove.

**6.49** Popplestone Island (48°55'N., 53°59'W.), Brag Island (48°56'N., 53°40'W.), and Deer Island (48°56'N., 53°44'W.) are the main islands of a group lying between Inner Gooseberry Island and Lewis Head (48°58'N., 53°44'W.). These islands are flat and brush-covered, with many rocks and shoals lying N and NE of them. The Popplestone, a conspicuous white boulder, lies on the coast about 0.8 mile NNW of Angel Head, the E end of Popplestone Island. Brag Rock (48°56'N., 53°38'W.) is a rock on which the sea breaks. A rock drying 1.2m is located 2 miles NW of Angel Head. A shoal, with a least depth of 3.1m lies 0.2 miles E of the drying rock. The Brandies (48°58'N., 53°39'W.) are a group of three rocky heads with a least depth of 1.5m, on which the sea usually breaks in moderate weather.

**Cottel Reach** (48°52'N., 53°41'W.) leads SW between Cottel Island and **Pitt Sound Island** (48°52'N., 53°43'W.), SE of **Lakeman Island** (48°50'N., 53°47'W.), where it joins Bloody Reach. **Pitt Sound Gates** (48°44'N., 53°52'W.) is a conspicuous patch of white quartz on black rock resembling enormous gates.

## Bonavista Bay—Cow Head to Shoe Cove Point—Inner Part

**6.50** Sailors Island (48°42'N., 53°40'W.) is connected E to Cow Head by a chain of islands and rocks. Sailors Harbor, entered S of the island, affords anchorage, in depths of 12.8 to 18.3m, rock. A house, in line bearing 059° with the N slope of Shag Island, leads into the harbor in a least depth of 6.5m.



#### Sailors Harbor

**Eastport Bay** (Salvage Bay) (48°40'N., 53°43'W.) is entered between **Wild Cove Head** (48°41'N., 53°41'W.) and **Baldric Head** (48°41'N., 53°43'W.). A group of islands and rocks extend 1 mile N of the head. Anchorage can be taken during the summer, in a depth of 9.1m, sand, in the bay. A break in a sand cliff in the N part of the head of Eastport Bay, bearing 228° and open SE of Baldrik Head, leads over a 20.1m ledge about 1.5 miles NE of the headland and into Eastport Bay, SE of rocks and shoals which lie SE of Bakers Loaf Island.

**Bloody Point** (48°45′N., 53°50′W.) is the N end of a promontory which forms the W buffer for numerous islands, islets,

and rocks which front the coast between Baldric Point and Bloody Point. At **Burnside** (48°43'N., 53°47'W.), a settlement on the mainland close S of Squid Island, is a wharf with depths of 1.2 to 4.3m alongside.



Burnside

**Bloomer Harbor** (48°43'N., 53°50'W.) has depths of 28.8m, mud, in its outer part, and 14.6m, mud, in its inner part.

**Bloody Reach** (48°48'N., 53°48'W.) extends about 9 miles SW from its entrance between Lakeman Island and Cottel Island. **Beaches Head** (48°48'N., 53°49'W.), 1.75 miles SW of Lakeman Island, is composed of three steep hills connected by beaches. Beaches Cove, lying close N of the highest hill, is small but clear of dangers, and affords anchorage to small vessels, in a depth of 5.5m.

**6.51 Alexander Bay** (48°43'N., 53°55'W.), at the SW end of Bloody Reach, has three arms. **Northeast Arm** (48°42'N., 53°56'W.) affords anchorage in depths of less than 18.3m, about 0.8 mile within the entrance. A causeway with a bridge crosses Northeast Arm. The bridge has a vertical clearance of 4m; there is a least depth of 3.2m in the channel at the bridge. There are strong currents flowing under the bridge.

**Middle Arm** (48°41'N., 53°59'W.), with a constricted entrance leading to an open basin, has a settlement at the head of the arm where there is a wharf with a depth of 5.2m alongside. **Northwest Arm** (48°44'N., 53°57'W.), clear of sunken dangers, has fringing shoals off the entrance points and an above-water rock lying in the middle of the entrance. There are depths of 5.5 to 9.1m off the entrance to **Norton Cove** (48°44'N., 53°59'W.), and 1.3m over the bar at the entrance to the inner part of the arm.

**Rocky Bay** (48°48'N., 53°50'W.), entered between Beaches Head Island and Rocky Island, about 1.3 miles SSW, affords anchorage, in depths of 16.5 to 23.8m. Local knowledge is essential.

**Content Reach** (48°51'N., 53°55'W.) extends from the W end of **Locker Flat Island** (48°52'N., 53°51'W.) to the entrance of Freshwater Bay, about 6 miles WSW. **Shoal Bay** (48°52'N., 53°57'W.) has a settlement and shallow water pier at the head of the bay.

**Hare Bay** (48°51'N., 53°59'W.), with Hare Island in its entrance, has a settlement at its head where there is a pier with

a depth of 3.7m alongside. Anchorage can be taken, in depths of 7.3 to 32.9m, mud, with Hare Island bearing 093°.

**Freshwater Bay** (48°49'N., 54°05'W.) is divided into two channels by the Hen Islands. The N channel is shallow; the S channel is deeper and clear of dangers. **Boutcher's Cove** (48°50'N., 54°00'W.), close within the N entrance point of the bay, has depths of 7.3 to 23.8m, mud. **Gambo** (48°46'N., 54°12'W.) is a settlement at the head of the bay.

**Locker Bay** (48°54'N., 53°55'W.) is approached through **Locker Reach** (48°55'N., 53°49'W.). The bay is clear of dangers in the channel except for **Lockers Rock** (48°54'N., 53°53'W.), awash, lying in the middle of the fairway.

**Anchorage.**—Anchorage can be taken, in depths of 11 to 21.9m, mud, W of **Birchy Head** (48°53'N., 53°58'W.). **Chalky Cove** (48°55'N., 53°52'W.) affords temporary anchorage, in depths of 7.3 to 18.3m, rock, clear of a rock with a depth of 0.3m, lying about 0.2 mile E of the W entrance point of the cove.

**6.52 Lewis Island** (48°57'N., 53°47'W.) has a remarkable, steep hill near the middle of its S side, with conspicuous boulders on its summit. The island is separated from the mainland SW by **Trinity Gut** (48°47'N., 53°49'W.), at least 0.2 mile wide, with a fairway clear of dangers and depths of 12.8 to 21.9m in mid-channel.

**Trinity Bay** (48°58'N., 53°44'W.) is entered between **Lewis Head** (48°58'N., 53°44'W.) and the **Fair Islands** (48°59'N., 53°44'W.), a group of dome-shaped islands of variable heights extending W to Pork Island. A light is shown from a tower on Grindstone Head, the SW end of the E island. **Southwest Island** (48°58'N., 53°43'W.) lies on the N side of the entrance to the bay. **Saint Island** (48°58'N., 53°45'W.) lies in the middle of the fairway, with a sunken and above-water rock lying close to its E end and N side, respectively. **Drake Island** (48°58'N., 53°50'W.), at the N entrance of Trinity Gut, is formed by two hills connected by a low isthmus.

The head of Trinity Bay is divided into two arms by a narrow peninsula. A pier, with a depth of 2.7m alongside, extends E from the peninsula.

**Ice.**—The Fair Islands anchorage freezes about January 11 and clears about April 13. Northern ice arrives at Trinity Bay about March 5, and remains until about April 25. The bay is usually covered with locally-formed ice during February and March.

**Anchorage.**—Anchorage can be taken in **Drake Cove** (48°47'N., 53°51'W.), SW of Drake Island, in depths of 12.8 to 18.3m, with local knowledge. Also, there is good anchorage for small vessels off the SW side of the easternmost of the Fair Islands.

**6.53** Indian Bay (49°01'N., 53°43'W.) is entered between Silver Fox Island (49°01'N., 53°41'W.) and the mainland to the N. The bay extends 8 miles to the W where it divides into two arms. Cat Island (49°02'N., 53°43'W.), 0.5 mile N of Brown Fox Island, rises to a high hill at its E end. Above-water rocks and an island lie as far as 1.75 miles W of Cat Island and on the N side of the main channel. Cat Cove (49°02'N., 53°02'W.), located N of the E end of Cat Island, affords temporary anchorage, in depths of 12.8 to 23.8m, with local knowledge.

**North Arm** (49°02'N., 53°45'W.) affords good anchorage, in depths of 7.3 to 23.8m, mud, sheltered from all winds except from the SW. At the settlement of **Wareham** (49°01'N., 53°52'W.), there is a wharf with a depth of 2.4m. There is a light at the head of the wharf. At **Parsons Point** (49°02'N., 53°52'W.), there is another wharf with depths of 3 to 4.3m alongside.

**Newport Harbor** (49°02'N., 53°38'W.), entered 1 mile NE of Silver Fox Island, is clear of dangers except for a few rocks off the W side of the harbor, and an islet lying close S of the E entrance point. A remarkable cliffy hill rises close within the W entrance point. Anchorage can be taken, in depths of 7.3 to 9.1m, good holding ground, mud, in the harbor.

### **Bonavista Bay—Shoe Cove Point to Cape Freels**

**6.54** Shoe Cove Point (49°02'N., 53°36'W.) is flat and low, but rises steeply to hills close within the point. A light is shown from the point.



Shoe Cove Point in line with the N side of Copper Island, bearing 242\*

**Ice.**—Ice forms in the bays and inlets early in January and clear when the ice leaves the coast. The sea about Cape Freels freezes in January and the ice often remains until May.

**Depths—Limitations.**—Depths are variable over the numerous rocks, reefs, and shoals that extend as far as 9 miles offshore along this stretch of coast. In a moderate sea with favorable conditions, most of the dangers show; in heavy weather with a confused sea breaking in depths of 12.8 to 18.5m, approach to this part of the coast could be hazardous.

Greenspond Island (49°04'N., 53°35'W.), about 2 miles NNE of Shoe Cove Point, has a flat summit. Newell Island, **Puffin Island** (49°04'N., 53°33'W.), and **Copper Island** (49°03'N., 53°33'W.) lie on foul ground extending 1.5 miles SE of Greenspond Island. A light is shown on Puffin Island. **Midsummer Rock** (49°03'N., 53°34'W.), detached, with a depth of 0.6m, lies about 0.5 miles SW of Copper Island, and Black Reef, which dries 0.9m, lies about 0.3 mile S of the island. **Pond Tickle** (49°05'N., 53°36'W.) is the navigable channel between the mainland and Greenspond Island. An overhead power cable, with a clearance of 15m, crosses Pond Tickle in the vicinity of Ford Island. A red spar buoy marks the W edge of foul ground extending from Greenspond Island.

**Greenspond Harbor** (49°04'N., 53°34'W.) is located on the S side of the island and close to Ship Island, to which Greenspond Island is connected by a bridge with a vertical clearance of 2.4m. Pound Rocks Light is shown from a square tower standing on the N side of the E entrance to the harbor. Seine Rock Light marks a rock in the W entrance to the harbor. Range lights in the harbor are shown from white, skeletal towers, in line bearing 278°50', which lead through the E entrance, S of Pound Rocks.

**Ice.**—The harbor freezes about January 18, and is closed at intervals until February 8, after which it is generally closed by

thick ice until March 9. Field ice appears about March 11 and disappears about May 11.

There are several small piers throughout the harbor. The principal pier has a depth of 4 to 4.3m alongside.

Anchorage.—Anchorage can be taken in good weather between Greenspond Island and Maiden Island (49°04'N., 53°35'W.), indifferent holding ground, in depths of 12.8 to 18.3m, rock and sandy patches. There is anchorage, good holding ground, in a depth of 21.9m in Pond Tickle, about 0.3 mile NW of the W end of Greenspond Island. The W extremity of the island, bearing 340° and open W of Maiden Island, leads W of Midsummer Rock. When E of Broad Cove (49°04'N., 53°36'W.), a vessel should steer for Main Pool's Island Church, bearing 006° and well open of Partridge Island (49°05'N., 53°35'W.), which leads W of the rocky shoals fringing Greenspond Island.

**6.55 Valleyfield Harbor** (49°07'N., 53°37'W.) is approached between numerous, scattered rocks, islets, and shoals, some marked by buoys. The outer dangers are cleared by steering on the approach range, in line bearing 286°30', which leads to the harbor entrance. The front tower is situated on an islet in **Puddingbag Cove** (49°06'N., 53°37'W.); the rear tower on the mainland. The settlement of Valleyfield is situated on the NE side of the harbor. A church with two towers is conspicuous when entering the harbor, as is a white church and tower on **Main Pool's Island** (49°06'N., 53°35'W.).

**Ice.**—Ice forms in the harbor early in January and breaks up near the end of April.

**Aspect.—South Pound Island** (49°06'N., 53°33'W.), lying close S of the range line, is marked by Western Shag Light, shown from a square tower. **Liver Ledge** (49°05'N., 53°30'W.), with a depth of 14.3m, lies in the approach. **North Pound Island** (49°06'N., 53°33'W.), with two rocky heads of 0.6m, lie close N of the range line. **Odd's Island** (49°06'N., 53°36'W.) and **Grassy Island** (49°06'N., 53°35'W.) lie on foul ground close S of the approach channel. Candle Cove Rocks Light is shown from a white tower situated 320m SSW of Odd's Island.

Main Pool's Island and **Big Pool's Island** (49°06'N., 59°35'W.) lie N of the approach range and, along with several smaller islands, lie on foul ground extending S of the harbor. The islands between Main Pool's Island and Valleyfield are joined together by bridges. On one of the islands, there is a fish plant and wharf with a depth of 4.9m alongside. Benburry Rock (49°07'N., 53°36'W.), with a depth of 2.4m, lies on the E edge of the harbor entrance channel. It is marked by a lighted buoy. The channel NW of the rock is marked by a port hand buoy. Wharves at Valleyfield include a public wharf, 150m long, with depths ranging from 1.9m on its NW end to 4.7m near its SW end. A second pier, 107m long, extends SE from the SE side of the public wharf to a depth of 5.6m at its outer end. A fish processing plant is located adjacent to the public wharf. A light is shown from a tower located on the outer end of the 107m wharf.

**Anchorage.**—Anchorage can be taken, in a depth of 12.8m, mud, with the W extremity of Grassy Island in line with the E end of Odd's Island bearing 150°, and Main Pool's Island church tower bearing 059°.

Anchorage can be taken, in 21.9m, thick mud, with the N side of Odd's Island bearing 265° and Main Pool's Island

church bearing 355°. A slight swell sets into this anchorage during E gales.

Small craft can anchor in the channel NW of Main Pool's Island or in Puddingbag Cove, with local knowledge.

**6.56 Wesleyville Harbor** (49°09'N., 53°34'W.) is approached between numerous off-lying dangers. Entry into the harbor is quite intricate and local knowledge is essential.

**Flowers Island** (49°08'N., 53°28'W.), with the Butterfly Islets (49°08'N., 53°29'W.), the **Three Rocks** (49°07'N., 53°27'W.), and the **Butterfly Islets** (49°08'N., 53°29'W.) lie within 1.5 miles of the SE approach channel. The Three Rocks are several rocky heads, with a least depth of 1.8m, all lying E of the channel. East Twin and **West Twin** (49°08'N., 53°31'W.), reefs with depths of 1.8 to 3.6m, lie 0.5 mile apart and close S of the channel. **Black Reef** (49°08'N., 53°29'W.), 1.2m above-water, lies less than 0.5 mile E of the channel.

**Black Island** (49°08'N., 53°33'W.) and **Ledger Rocks** (49°07'N., 53°33'W.), at the harbor entrance channel, are marked by a light shown from a white tower and a lighted bell buoy, respectively. The **Swain Islands** (49°33'N., 53°34'W.), a group of islets and rocks, lie on foul ground extending between Black Island and the mainland. **Bennets High Island** (49°08'N., 53°34'W.), marked by a lighted tower, lies on the E side of the channel. Buoys mark the W side of the channel.

Wesleyville Harbor is entered about 0.2 mile S of Bennets High Island through a channel about 90m wide and 7.3m deep. The spires and twin towers of churches, plus a water tower in town, are conspicuous. The public wharf on the E side of the harbor has depths of 3 to 6.1m alongside. There are numerous small fishing wharves and piers. A light is shown from a mast at the SW end of the public wharf.

**Directions.**—A vessel approaching Wesleyville Harbor from the SE should steer for Butterfly Islets bearing 333°, passing close SW of the W islet. Then the vessel should steer with the S extremity of the Flowers Islands in line bearing 090°, astern, with Black Reef. When N of West Twin Reef, course should be altered S to pass not less than 0.15 mile S of Black Island. Then steer with Bennets High Island Light bearing 300°, and when the SE extremity of the Swain Islands bears 030°, alter course for the anchorage outside the entrance.

**6.57 Pound Cove** (49°11'N., 53°33'W.) is a settlement along the shores of a cove indenting the mainland 2 miles N of Wesleyville. A church tower is prominent. Range lights, shown from framework structures at the settlement, in line bearing 291°, lead into the harbor. **Pouch Island** (49°10'N., 53°28'W.) lies on foul ground N of the range line. South Rock, with a depth of 3.4m, lies close N of the entrance range. **Honey Pot Island** (49°11'N., 53°31'W.), on which a light is shown from the NE end, and Pound Cove Light (49°10'N., 53°32'W.), shown from an islet, lie close N of the entrance channel.

**Off-lying dangers.**—The coast from Big Pool's Island (49°06'N., 53°35'W.) to South Bill of **Cape Freels** (48°06'N., 53°28'W.), the NW entrance point of Bonavista Bay, is fronted by numerous islands and shoals extending as far as 9 miles offshore near the Cabot Islands. These dangers make an approach to this part of the coast hazardous, especially in reduced visibility.

The **Cabot Islands** (49°10'N., 53°22'W.) are the outermost group of rocky islets lying almost 0.5 mile apart and encircled by foul ground. A light is shown from a red and white banded circular tower standing on the NW Cabot Island. **Stevenson Islets** (49°10'N., 53°25'W.), consisting of several above-water rocks, lie on foul ground and are marked by a light shown from a white, square tower.

**6.58 Stinking Banks** (49°11′N., 53°19′W.), extending 3 miles NE from the Cabot Islands, have depths of 7.3 to 11m. It is advisable to pass on the seaward side of the banks. **Parkers Ground** (49°09′N., 53°21′W.) and **Gullivers Ground** (49°09′N., 53°20′W.), with depths of 8.5m and 14.3m, respectively, are detached outer hazards.

**Gull Island** (49°15'N., 53°26'W.), about 6 miles N of Stevenson Islets and 1.25 miles E of South Bill, is marked by a light shown from a white structure. The area between the island and islets is encumbered with rocks, reefs, and shoals.

**Charge Rock** (49°15′N., 53°22′W.), with a depth of 1.5m, lies in a foul area about 2.5 miles ESE of Gull Island. A lighted whistle buoy is moored 0.5 mile N of the rock, which is usually marked by breakers.

**Pinchard's Bight** (49°13'N., 53°31'W.) is filled with numerous islets and rocks. The settlement of Newtown is situated around the S entrance point of the bight and adjacent islands, which are connected with each other and the mainland by bridges. A dredged channel leads to a shallow water public wharf at the settlement.

**Anchorage.**—Anchorage is afforded in the summer to vessels in the approaches to the bight, in a depth of 4.6m. Local knowledge is necessary.

**6.59 Middle Bill Cove** (49°15'N., 53°29'W.) lies between **Middle Bill** (49°16'N., 53°29'W.) and **South Bill** (49°15'N., 53°28'W.). The fishing villages of Cape Freels and Cape Freels North are situated along the S and W shores of the cove. There are public wharves at both settlements, but there are depths of only 1.5m alongside.

**Ice.**—The sea around Cape Freels freezes in January and the ice often remains near this cape in May and sometimes as late as June.

**Cape Freels** (49°16′N., 53°30′W.) is described in paragraph 7.2.